

SEARCH REQUEST FORM

Scientific and Technical Information Center

Requester's Full Name: BRIAN MELK Examiner #: 76173 Date: 8/25/05
 Art Unit: 1751 Phone Number 301(772)1321 Serial Number: 161561496
 Mail Box and Bldg/Room Location: BEA 9445 Results Format Preferred (circle) PAPER DISK E-MAIL

If more than one search is submitted, please prioritize searches in order of need.

Please provide a detailed statement of the search topic, and describe as specifically as possible the subject matter to be searched. Include the elected species or structures, keywords, synonyms, acronyms, and registry numbers, and combine with the concept or utility of the invention. Define any terms that may have a special meaning. Give examples or relevant citations, authors, etc, if known. Please attach a copy of the cover sheet, pertinent claims, and abstract.

Title of Invention: ALKYL - AND/OR ALKYLENE OLIGOGLYCOSIDE BETATINE ESTER QUATERNARIES

Inventors (please provide full names): 1) ANSCAR BEHLER
2) FRANK CLASEN

Earliest Priority Filing Date: JANUARY 16, 2002

For Sequence Searches Only Please include all pertinent information (parent, child, divisional, or issued patent numbers) along with the appropriate serial number.

PLEASE SEARCH THE STRUCTURE OF THE COMPOUND FOUND IN
 THE ATTACHED CLAIM 10. THANKS.

* PREFERRED GROUPS FOR R^2 AND R^3 ARE HYDROGEN

* PREFERRED GROUPS FOR R^4 , R^5 AND R^6 ARE METHYL OR HYDROXYETHYL

(SORRY FOR ANY STRAY HITS ON "GLYCOL".)

STAFF USE ONLY	Type of Search	Vendors and cost where applicable
Searcher: <u>EL</u>	NA Sequence (#) _____	STN <u>\$ 622.06</u>
Searcher Phone #: _____	AA Sequence (#) _____	Dialog _____
Searcher Location: _____	Structure (#) <u>✓ (3)</u>	Questel/Orbit _____
Date Searcher Picked Up: _____	Bibliographic <u>✓ (6)</u>	Dr. Link _____
Date Completed: <u>9-15-05</u>	Litigation <u>✓</u>	Lexis/Nexis _____
Searcher Prep & Review Time: <u>5</u>	Fulltext _____	Sequence Systems _____
Clerical Prep Time: _____	Patent Family _____	WWW/Internet _____
Online Time: <u>100</u>	Other _____	Other (specify) _____

=> FILE REG

FILE 'REGISTRY' ENTERED AT 16:39:25 ON 15 SEP 2005
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=> D HIS

FILE 'HCAPLUS' ENTERED AT 14:07:36 ON 15 SEP 2005

L1 337 S BEHLER ?/AU
L2 359 S CLASEN ?/AU
L3 16 S L1 AND L2
L4 782 S ?OLIGOGLYCOS? OR OLIGO(2A)GLYCOS?
L5 1256 S ?OLIGOGL!COS? OR OLIGO(2A)GL!COS?
L6 1 S L3 AND L5

FILE 'HCA' ENTERED AT 14:12:07 ON 15 SEP 2005

L7 20216 S ?BETAIN?
L8 1707 S ?ESTERQUAT? OR ESTER?(2A)QUAT?
L9 1245 S ?OLIGOGL!COS? OR OLIGO(2A)GL!COS?

FILE 'HCAPLUS' ENTERED AT 14:14:00 ON 15 SEP 2005
SEL L6 1 RN

FILE 'REGISTRY' ENTERED AT 14:14:15 ON 15 SEP 2005

L10 3 S E1-E3
L11 1 S 79-11-8
L12 1 S 108-01-0
L13 1 S 219686-82-5

FILE 'HCA' ENTERED AT 14:20:51 ON 15 SEP 2005

L14 9417 S L11
L15 5650 S L12
L16 22 S L13
L17 33 S L14 AND L15
L18 1 S L17 AND (L16 OR L9)
L19 8 S L17 AND (?GLYCO? OR ?GLUCO?)
L20 2 S L7 AND L8 AND L9

FILE 'REGISTRY' ENTERED AT 14:26:47 ON 15 SEP 2005
ACT ALKYLGLY/A

L21 STR
L22 STR

L23 STR
L24 SCR 1992 OR 2016 OR 2021 OR 2026 OR 1929 OR 1918 OR 1312
L25 1638 SEA FILE=REGISTRY SSS FUL (L21 AND (L22 OR L23)) NOT L24

FILE 'LREGISTRY' ENTERED AT 14:28:11 ON 15 SEP 2005

E GLUCOSE/CN
L26 1 S E3
E RIBOSE/CN
L27 1 S E3

FILE 'HCA' ENTERED AT 14:32:51 ON 15 SEP 2005

L28 4030 S L25
L29 5 S L28 AND L14
L30 3 S L28 AND L15
L31 0 S L29 AND L30
L32 199 S L28 AND L7
L33 6 S L28 AND L8
L34 4 S L32 AND L33
L35 95 S L25/D OR L25/DP
L36 5 S L35 AND L7

FILE 'LREGISTRY' ENTERED AT 14:36:51 ON 15 SEP 2005

E BETAIN/CN
L37 1 S E3

FILE 'LREGISTRY' ENTERED AT 15:32:10 ON 15 SEP 2005

L38 STR
L39 STR
L40 STR

FILE 'REGISTRY' ENTERED AT 16:01:43 ON 15 SEP 2005

L41 0 S L38 AND L39 AND L40
L42 STR L40
L43 0 S L38 AND L39 AND L42
L44 27 S L38 AND L39 AND L42 FUL
SAV L44 MRU490/A

FILE 'HCA' ENTERED AT 16:09:35 ON 15 SEP 2005

L45 9 S L44
L46 1 S L16 AND L14
L47 7 S (L9 OR L28) AND L14
L48 5 S L47 AND (L15 OR ?AMINO? OR ?AMINE?)
L49 4 S L47 AND (L7 OR L8)

FILE 'REGISTRY' ENTERED AT 16:24:37 ON 15 SEP 2005

L50 419560 S (C(L)H(L)N)/ELS AND 1/N AND NO RSD/FA
L51 15710 S L50 AND 3/ELC.SUB

L52 145906 S L50 AND O/ELS AND 4/ELC.SUB

FILE 'HCA' ENTERED AT 16:27:29 ON 15 SEP 2005

L53 264956 S L51

L54 732509 S L52

L55 3810 S (L53 OR L54 OR ?AMINO? OR ?AMINE?) AND L14

L56 6 S L55 AND (L9 OR L28)

L57 38 S L18 OR L19 OR L20 OR L29 OR L30 OR L33 OR L34 OR L36 OR

FILE 'REGISTRY' ENTERED AT 16:39:25 ON 15 SEP 2005

=> D L44 QUE STAT

L38 STR

Ak 1

NODE ATTRIBUTES:

CONNECT IS E1 RC AT 1

DEFAULT MLEVEL IS ATOM

DEFAULT ECLEVEL IS LIMITED

ECOUNT IS M4 C AT 1

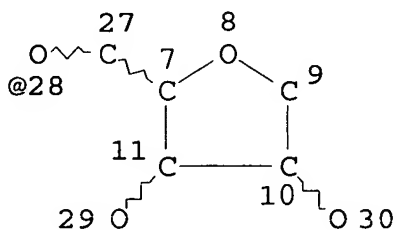
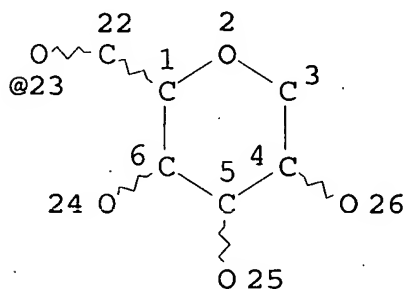
GRAPH ATTRIBUTES:

RING(S) ARE ISOLATED OR EMBEDDED

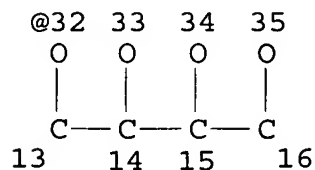
NUMBER OF NODES IS 1

STEREO ATTRIBUTES: NONE

L39 STR



G1 38



VAR G1=23/28/32

NODE ATTRIBUTES:

DEFAULT MLEVEL IS ATOM

DEFAULT ECLEVEL IS LIMITED

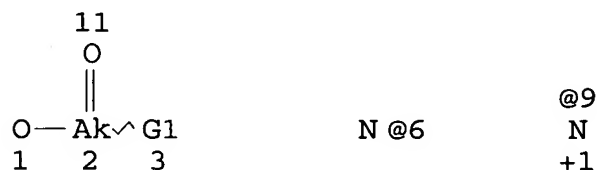
GRAPH ATTRIBUTES:

RING(S) ARE ISOLATED OR EMBEDDED

NUMBER OF NODES IS 29

STEREO ATTRIBUTES: NONE

L42 STR



VAR G1=6/9

NODE ATTRIBUTES:

CHARGE IS E+1 AT 9

NSPEC IS RC AT 6

NSPEC IS RC AT 9

CONNECT IS E3 RC AT 2

CONNECT IS E4 RC AT 6

DEFAULT MLEVEL IS ATOM

DEFAULT ECLEVEL IS LIMITED

GRAPH ATTRIBUTES:

RING(S) ARE ISOLATED OR EMBEDDED

NUMBER OF NODES IS 6

STEREO ATTRIBUTES: NONE

L44 27 SEA FILE=REGISTRY SSS FUL L38 AND L39 AND L42

100.0% PROCESSED 319999 ITERATIONS

27 ANSWERS

SEARCH TIME: 00.00.07

=> FILE HCA

FILE 'HCA' ENTERED AT 16:39:49 ON 15 SEP 2005

USE IS SUBJECT TO THE TERMS OF YOUR STN CUSTOMER AGREEMENT.

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=> D L57 1-38 CBIB ABS HITSTR HITIND

L57 ANSWER 1 OF 38 HCA COPYRIGHT 2005 ACS on STN

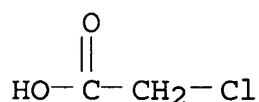
141:407236 Treatment of plants and plant propagation materials with an antioxidant and pesticide to improve plant health and/or yield. Asrar, Jawed; Ding, Yiwei; Bourque, June E.; Sanders, Ernest F. (Monsanto Technology, LLC, USA). PCT Int. Appl. WO 2004095926 A2 20041111, 79 pp. DESIGNATED STATES: W: AE, AG, AL, AM, AT, AU, AZ, BA, BB, BG, BR, BW, BY, BZ, CA, CH, CN, CO, CR, CU, CZ, DE, DK, DM, DZ, EC, EE, EG, ES, FI, GB, GD, GE, GH, GM, HR, HU, ID, IL, IN, IS, JP, KE, KG, KP, KR, KZ, LC, LK, LR, LS, LT, LU, LV, MA, MD, MG, MK, MN, MW, MX, MZ, NA, NI, NO, NZ, OM, PG, PH, PL, PT, RO, RU, SC, SD, SE, SG, SK, SL, SY, TJ, TM, TN, TR, TT, TZ, UA, UG, US, UZ, VC, VN, YU, ZA, ZM, ZW; RW: AT, BE, BF, BJ, CF, CG, CH, CI, CM, CY, DE, DK, ES, FI, FR, GA, GB, GR, IE, IT, LU, MC, ML, MR, NE, NL, PT, SE, SN, TD, TG, TR. (English). CODEN: PIXXD2. APPLICATION: WO 2004-US10720 20040407. PRIORITY: US 2003-2003/PV466104 20030428.

AB Methods and compns. are described for the treatment of plants and plant propagation materials with an antioxidant alone or in combination with a pesticide for improved germination rates. Plants that grow from treated plant propagation materials, or plants that are treated directly, show improved stand d. or vigor, and/or improved yields.

IT 79-11-8D, Chloroacetic acid, mixt. with antioxidant
108-01-0D, N,N-Dimethylethanolamine, mixt. with pesticide
(seed and plant treatment compn. to improve germination, plant health and yield)

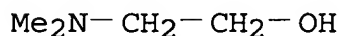
RN 79-11-8 HCA

CN Acetic acid, chloro- (8CI, 9CI) (CA INDEX NAME)



RN 108-01-0 HCA

CN Ethanol, 2-(dimethylamino)- (8CI, 9CI) (CA INDEX NAME)



IC ICM A01N033-12
ICS A01N031-16; A01N031-08; A01N037-44; A01C001-06; A01N043-10

CC 5-3 (Agrochemical Bioregulators)

IT Amines, biological studies
Glycoproteins
Lecithins
Lysophosphatidylcholines
Lysophosphatidylethanolamines

Phosphatidylcholines, biological studies
 Phosphatidylethanolamines, biological studies
 Phosphatidylserines
 Phosphites
 Proanthocyanidins
 Proteoglycans, biological studies
 Tocopherols

(mixt. with pesticide; seed and plant treatment compn. to improve germination, plant health and yield)

IT **Glycosides**

(steroidal, mixt. with pesticide; seed and plant treatment compn. to improve germination, plant health and yield)

IT 50-31-7D, 2,3,6-TBA, mixt. with antioxidant 50-78-2D,
 Acetylsalicylic acid, mixt. with pesticide 50-81-7D, Vitamin C,
 mixt. with pesticide 52-90-4D, Cysteine, mixt. with pesticide
 56-40-6D, Glycine, mixt. with pesticide 56-89-3D, Cystine, mixt.
 with pesticide 58-85-5D, Biotin, mixt. with pesticide 59-30-3D,
 Folic acid, mixt. with pesticide 59-43-8D, Thiamin, mixt. with
 pesticide 59-67-6D, Niacin, mixt. with pesticide 60-00-4D, EDTA,
 mixt. with pesticide 61-82-5D, Amitrole, mixt. with antioxidant
 62-49-7D, Choline, mixt. with pesticide 62-49-7D, Choline, salts.,
 mixt. with pesticide 63-25-2D, Carbaryl, mixt. with antioxidant
 63-68-3D, Methionine, mixt. with pesticide 65-23-6D, Pyridoxine,
 mixt. with pesticide 67-48-1D, Choline chloride, mixt. with
 pesticide 69-65-8D, Mannitol, mixt. with pesticide 69-72-7D,
 Salicylic acid, mixt. with pesticide 71-00-1D, Histidine, mixt.
 with pesticide 73-22-3D, Tryptophan, mixt. with pesticide
 74-79-3D, Arginine, mixt. with pesticide 75-60-5D,
 Dimethylarsinic acid, mixt. with antioxidant 75-99-0D, Dalapon,
 mixt. with antioxidant 79-11-8D, Chloroacetic acid, mixt.
 with antioxidant 79-81-2D, Retinyl palmitate, mixt. with pesticide
 79-83-4D, Pantothenic acid, mixt. with pesticide 79-96-9D,
 4,4'-(1-Methylethylidene)bis[2-(1,1-dimethylethyl)phenol, mixt. with
 pesticide 83-46-5D, .beta.-Sitosterol, mixt. with pesticide
 83-48-7D, Stigmasterol, mixt. with pesticide 83-86-3D, mixt. with
 pesticide 83-88-5D, Riboflavin, mixt. with pesticide 85-00-7D,
 Diquat dibromide, mixt. with antioxidant 85-60-9D,
 4,4'-Butylidenebis(6-tert-butyl-m-cresol), mixt. with pesticide
 87-86-5D, Pentachlorophenol, mixt. with antioxidant 87-89-8D,
 Inositol, mixt. with pesticide 89-83-8D, Thymol, mixts. with
 antioxidants 92-52-4D, Biphenyl, mixts. with antioxidants
 92-88-6D, 4,4'-Biphenol, mixt. with pesticide 93-65-2D, Mecoprop,
 mixt. with antioxidant 94-13-3D, Propylparaben, mixts. with
 antioxidants 94-74-6D, MCPA, mixt. with antioxidant 94-75-7D,
 2,4-D, mixt. with antioxidant 94-81-5D, MCPB, mixt. with
 antioxidant 94-82-6D, 2,4-DB, mixt. with antioxidant 96-69-5D,
 4,4'-Thiobis-6-(tert-butyl-m-cresol), mixt. with pesticide
 97-53-0D, Eugenol, mixts. with antioxidants 98-29-3D,

4-tert-Butylcatechol, mixt. with pesticide 101-21-3D,
Chloropropham, mixt. with antioxidant 101-42-8D, Fenuron, mixt.
with antioxidant 107-02-8D, Acrolein, mixt. with antioxidant
107-22-2D, Glyoxal, mixt. with pesticide 107-43-7D, Betaine, mixt.
with pesticide 108-01-0D, N,N-Dimethylethanolamine, mixt.
with pesticide 108-95-2D, Phenol, styrenated, mixt. with pesticide
111-17-1D, Thiodipropionic acid, mixt. with pesticide 112-05-0D,
Nonanoic acid, mixt. with antioxidant 112-80-1D, Oleic acid, mixt.
with antioxidant 115-11-7D, Isobutylene, mixt. with pesticide
116-06-3D, Aldicarb, mixt. with antioxidant 119-13-1D,
.delta.-Tocopherol, mixt. with pesticide 120-36-5D, Dichloroprop,
mixt. with antioxidant 121-33-5D, Vanillin, mixts. with
antioxidants 121-75-5D, Malathion, mixt. with antioxidant
121-79-9D, Propyl gallate, mixt. with pesticide 122-34-9D,
Simazine, mixt. with antioxidant 122-42-9D, Propham, mixt. with
antioxidant 123-28-4D, Dilauryl thiodipropionate, mixt. with
pesticide 124-58-3D, Methylarsonic acid, mixt. with antioxidant
127-40-2D, Lutein, mixt. with pesticide 127-47-9D, Retinyl
acetate, mixt. with pesticide 128-37-0D, (BHT), mixt. with
pesticide 132-27-4D, Sodium o-phenylphenol, mixts. with
antioxidants 132-66-1D, Naptalam, mixt. with antioxidant
133-90-4D, Chloramben, mixt. with antioxidant 139-40-2D,
Propazine, mixt. with antioxidant 144-54-7D, ,Metam, mixt. with
antioxidant 144-68-3D, mixt. with pesticide 145-73-3D, mixt.
with antioxidant 147-47-7D, 2,2,4-Trimethyl-1,2-dihydroquinoline,
poly,er, mixt. with pesticide 147-85-3D, Proline, mixt. with
pesticide 148-03-8D, .beta.-Tocopherol, mixt. with pesticide
148-79-8D, Thiabendazole, mixts. with antioxidants 303-07-1D,
2,6-Dihydroxybenzoic acid, mixt. with pesticide 303-98-0D,
Coenzyme Q10, mixt. with pesticide 314-40-9D, Bromacil, mixt. with
antioxidant 330-54-1D, Diuron, mixt. with antioxidant 330-55-2D,
Linuron, mixt. with antioxidant 333-41-5D, mixt. with antioxidant
443-48-1D, Metronidazole, mixt. with pesticide 467-69-6D,
Flurenol, mixt. with antioxidant 474-62-4D, Campesterol, mixt.
with pesticide 481-14-1D, Isofucosterol, mixt. with pesticide
490-23-3D, .beta.-Tocotrienol, mixt. with pesticide 499-75-2D,
Carvacrol, mixts. with antioxidants 502-65-8D, Lycopene, mixt.
with pesticide 521-03-9D, mixt. with pesticide 530-59-6D,
Sinapic acid, mixt. with pesticide 532-32-1D, Sodium benzoate,
mixts. with antioxidants 533-74-4D, Dazomet, mixt. with
antioxidant 534-52-1D, ,DNOC, mixt. with antioxidant 555-37-3D,
Neburon, mixt. with antioxidant 556-61-6D, Methyl isothiocyanate,
mixt. with antioxidant 559-70-6D, .beta.-Amyrin, mixt. with
pesticide 583-39-1D, mixt. with pesticide 584-79-2D,
2-Allyl-4-hydroxy-3-methyl-2-cyclopenten-1-one ester of
2,2-dimethyl-3-(2-methylpropenyl)cyclopropanecarboxylic acid, mixt.
with antioxidant 616-91-1D, N-Acetylcysteine, mixt. with pesticide
650-51-1D, mixt. with antioxidant 696-23-1D, 2-Methyl-5-

nitroimidazole, mixt. with pesticide 709-98-8D, PPropanil, mixt. with antioxidant 719-22-2D, 2,6-Di-tert-butyl-p-benzoquinone, mixt. with pesticide 741-58-2D, Bensulide, mixt. with antioxidant 756-09-2D, Flupropanate, mixt. with antioxidant 759-94-4, EPTC 834-12-8D, Ametryn, mixt. with antioxidant 886-50-0D, TERbutryn, mixt. with antioxidant 957-51-7D, Diphenamide, mixt. with antioxidant 1014-70-6D, Simetryn, mixt. with antioxidant 1071-83-6D, Glyphosate, mixt. with antioxidant 1079-21-6D, PHEnylhydroquinone, mixts. with antioxidants 1114-71-2D, Pebulate, mixt. with antioxidant 1118-68-9D, Dimethylglycine, mixt. with pesticide 1134-23-2D, Cycloate, mixt. with antioxidant 1135-24-6D, complex, mixt. with pesticide 1135-24-6D, Ferulic acid, mixt. with pesticide 1166-52-5D, Dodecyl gallate, mixt. with pesticide 1176-52-9D, Gramisterol, mixt. with pesticide 1194-65-6D, Dichlobenil, mixt. with antioxidant 1200-22-2D, .alpha.-Lipoic acid, mixt. with pesticide 1303-96-4D, Borax, mixt. with antioxidant 1406-18-4D, Vitamin E, mixt. with pesticide 1420-07-1D, Dinoterb, mixt. with antioxidant 1421-63-2D, Trihydroxybutyrophenone, mixt. with pesticide 1421-63-2D, Trihydroxybutyrophenone, mixts. with antioxidants 1449-09-8D, 24-Methylenecycloartanol, mixt. with pesticide 1582-09-8D, Trifluralin, mixt. with antioxidant 1610-18-0D, Prometon, mixt. with antioxidant 1689-83-4D, Ioxynil, mixt. with antioxidant 1689-84-5D, Bromoxynil, mixt. with antioxidant 1698-60-8D, Chloridazon, mixt. with antioxidant 1702-17-6D, Clopyralid, mixt. with antioxidant 1709-70-2D, Ethanox 330, mixt. with pesticide 1721-51-3D, .alpha.-Tocotrienol, mixt. with pesticide 1746-81-2D, Monolinuron, mixt. with antioxidant 1861-40-1D, Benfluralin, mixt. with antioxidant 1897-45-6D, Chlorothalonil, mixt. with antioxidant 1910-42-5D, Paraquat dichloride, mixt. with antioxidant 1912-24-9D, Atrazine, mixt. with antioxidant 1912-26-1D, Trietazine, mixt. with antioxidant 1918-00-9D, Dicamba, mixt. with antioxidant 1918-02-1D, Picloram, mixt. with antioxidant 1918-13-4D, mixt. with antioxidant 1918-16-7D, Propachlor, mixt. with antioxidant 1929-77-7D, Vernolate., mixt. with antioxidant 1948-33-0D, mixt. with pesticide 1982-49-6D, Siduron, mixt. with antioxidant 2008-41-5D, Butylate, mixt. with antioxidant 2082-79-3D, 2,6-Di-tert-butyl-4-(octadecanoxycarbonylethyl)phenol, mixt. with pesticide 2164-08-1D, Lenacil, mixt. with antioxidant 2164-17-2D, Fluometuron, mixt. with antioxidant 2212-67-1D, Molinate, mixt. with antioxidant 2303-17-5D, Triallate, mixt. with antioxidant 2307-68-8D, Pentanochlor, mixt. with antioxidant 2309-07-1D, Methyl ferulate, mixt. with pesticide 2536-31-4D, mixt. with antioxidant 2797-51-5D, Quinoclamine, mixt. with antioxidant 2921-88-2D, Chloropyrifos, mixt. with antioxidant 3060-89-7D, Metobromuron, mixt. with antioxidant 3337-71-1D, Asulam, mixt. with antioxidant 3813-05-6D, Benazolin, mixt. with antioxidant

5234-68-4D, Carboxin, mixt. with antioxidant 5392-40-5D, Citral, mixts. with antioxidants 5598-13-0D, mixt. with antioxidant 5902-51-2D, Terbacil, mixt. with antioxidant 5915-41-3D, Terbutylazine, mixt. with antioxidant 6683-19-8D, mixt. with pesticide 7235-40-7D, (Betacarotene), mixt. with pesticide 7287-19-6D, Prometryn, mixt. with antioxidant 7400-08-0D, p-Coumaric acid, mixt. with pesticide 7439-95-4D, Magnesium, compds., mixt. with pesticide 7440-66-6D, Zinc, mixt. with pesticide 7440-70-2D, Calcium, compds., mixt. with pesticide 7488-99-5D, .alpha.-Carotene, mixt. with pesticide 7616-22-0D, .gamma.-Tocopherol, mixt. with pesticide 7664-93-9D, Sulfuric acid, mixt. with antioxidant 7696-12-0D, Tetramethrin, mixt. with antioxidant 7720-78-7D, Ferrous sulfate, mixt. with antioxidant 7723-14-0D, Phosphorus, compds., mixt. with pesticide 7773-06-0D, Ammonium sulfamate, mixt. with antioxidant 7775-09-9D, Sodium chlorate, mixt. with antioxidant 7782-49-2D, Selenium, mixt. with pesticide 9001-05-2D, Catalase, mixt. with pesticide 9002-10-2D, Polyphenol oxidase, mixt. with pesticide 9013-66-5D, Glutathione peroxidase, mixt. with pesticide 9036-66-2D, Arabinogalactan, mixt. with pesticide 9040-27-1D, Arabinoxylan, mixt. with pesticide 9054-89-1D, Superoxide dismutase, mixt. with pesticide 10004-44-1D, HYmexazole, mixt. with antioxidant 10453-86-8D, (Resmethrin, mixt. with antioxidant 10595-72-9D, mixt. with pesticide 11103-57-4D, Vitamin A, mixt. with pesticide 12001-76-2D, Vitamin B, mixt. with pesticide 13221-22-2D, Arabinofuranose, mixt. with pesticide 13360-45-7D, mixt. with antioxidant 13684-56-5D, Desmedipham, mixt. with antioxidant 13684-63-4D, Phenmedipham, mixt. with antioxidant 14101-61-2D, .gamma.-Tocotrienol, mixt. with pesticide 15165-67-0D, Dichlorprop-P, mixt. with antioxidant 15299-99-7D, Napropamide, mixt. with antioxidant 15972-60-8D, Alachlor, mixt. with antioxidant 16118-49-3D, Carbetamide, mixt. with antioxidant 16484-77-8D, Mecoprop-P, mixt. with antioxidant 16545-54-3D, Dimyristyl thiodipropionate, mixt. with pesticide 16910-32-0D, Obtusifoliol, mixt. with pesticide 18691-97-9D, Methabenzthiazuron, mixt. with antioxidant 19044-88-3D, Oryzalin, mixt. with antioxidant 19666-30-9D, Oxadiazon, mixt. with antioxidant 19937-59-8D, Metoxuron, mixt. with antioxidant 21087-64-9D, Metribuzin, mixt. with antioxidant 21238-33-5D, **glycoside**, mixt. with pesticide 21293-29-8D, Absciscic acid, mixt. with pesticide 21725-46-2D, Cyanazine, mixt. with antioxidant 22224-92-6D, Fenamiphos, mixt. with antioxidant 22936-75-0D, Dimethametryn, mixt. with antioxidant 23031-36-9D, (Prallethrin, mixt. with antioxidant 23135-22-0D, Oxamyl, mixt. with antioxidant 23184-66-9D, Butachlor, mixt. with antioxidant 23950-58-5D, Propyzamide, mixt. with antioxidant 24151-93-7D, Piperophos, mixt. with antioxidant 24634-61-5D, Potassium-sorbate, mixts. with antioxidants 25013-16-5D, 2-(3)-tert-Butyl-4-

hydroxyanisole, mixt. with pesticide 25057-89-0D, Bentazone, mixt. with antioxidant 25319-90-8D, MCPATHIOETHYL, mixt. with antioxidant 25612-59-3D, .delta.-Tocotrienol, mixt. with pesticide 26225-79-6D, Ethofumesate, mixt. with antioxidant 26523-78-4D, Tris(nonylphenyl)phosphite, mixt. with pesticide 27314-13-2D, Norflurazon, mixt. with antioxidant 27676-62-6D, 1,3,5-Tris(3,5-di-tert-butyl-4-hydroxybenzyl)-1,3,5-triazine-2,4,6(1H,3H,5H)-trione, mixt. with pesticide 28249-77-6D, Thiobencarb, mixt. with antioxidant

(seed and plant treatment compn. to improve germination, plant health and yield)

IT 29091-05-2D, Dinitramine, mixt. with antioxidant 29091-21-2D, ProDiamine, mixt. with antioxidant 30560-19-1D, Acephate, mixt. with antioxidant 33629-47-9D, Butralin, mixt. with antioxidant 33693-04-8D, Terbumeton, mixt. with antioxidant 34014-18-1D, Tebuthiuron, mixt. with antioxidant 34123-59-6D, Isoproturon, mixt. with antioxidant 34205-21-5D, Dimefuron, mixt. with antioxidant 34256-82-1D, Acetochlor, mixt. with antioxidant 34622-58-7D, Orbencarb, mixt. with antioxidant 35256-85-0D, Tebutam, mixt. with antioxidant 35554-44-0D, Imazalil, mixt. with antioxidant 35597-43-4D, Bilanafos, mixt. with antioxidant 36335-67-8D, Butamifos, mixt. with antioxidant 36756-79-3D, Tiocarbazil, mixt. with antioxidant 37294-28-3D, Xyloglucan, mixt. with pesticide 38146-05-3D, mixt. with pesticide 38953-85-4D, Isovitexin, mixt. with pesticide 39515-40-7D, (Cyphenothrin; mixt. with antioxidant 39515-41-8D, (Fenpropathrin, mixt. with antioxidant 39807-15-3D, Oxadiargyl, mixt. with antioxidant 39985-63-2D, MK 616, mixt. with antioxidant 40487-42-1D, Pendimethalin, mixt. with antioxidant 41394-05-2D, Metamitron, mixt. with antioxidant 42576-02-3D, Bifenox, mixt. with antioxidant 42609-52-9D, Daimuron, mixt. with antioxidant 42609-73-4D, Methyldymron, mixt. with antioxidant 42874-03-3D, Oxyfluorfen, mixt. with antioxidant 43222-48-6D, Difenzoquat methylsulfate, mixt. with antioxidant 50563-36-5D, DIMETHACHLOR, mixt. with antioxidant 50594-66-6D, Acifluorfen, mixt. with antioxidant 51218-45-2D, METOLACHLOR, mixt. with antioxidant 51218-49-6D, Pretilachlor, mixt. with antioxidant 51235-04-2D, Hexazinone, mixt. with antioxidant 51338-27-3D, Diclof opmethyl, mixt. with antioxidant 51630-58-1D, Fenvalerate, mixt. with antioxidant 52315-07-8D, Cypermethrin, mixt. with antioxidant 52570-16-8D, Naproanilide, mixt. with antioxidant 52645-53-1D, Permethrin, mixt. with antioxidant 52888-80-9D, PROSULFOCARB, mixt. with antioxidant 53780-34-0D, MeFluidide, mixt. with antioxidant 54406-48-3D, (Empenthrin, mixt. with antioxidant 55179-31-2D, Bitertanol, mixt. with antioxidant 55219-65-3D, TRIADIMENOL, mixt. with antioxidant 55283-68-6D, Ethalfluralin, mixt. with antioxidant 55290-64-7D, Dimethipin, mixt. with antioxidant 55335-06-3D, Triclopyr, mixt. with antioxidant

55512-33-9D, Pyridate, mixt. with antioxidant 55634-91-8D, Alloxymid, mixt. with antioxidant 55861-78-4D, Isouron, mixt. with antioxidant 57646-30-7D, Furalaxyl, mixt. with antioxidant 57837-19-1D, Metalaxyl, mixt. with antioxidant 57966-95-7D, Cymoxanil, mixt. with antioxidant 58011-68-0D, Pyrazolynate, mixt. with antioxidant 58769-20-3D, Kadethrin, mixt. with antioxidant 58810-48-3D, Ofurace, mixt. with antioxidant 59669-26-0D, Thiodicarb, mixt. with antioxidant 59682-52-9D, Fosamine, mixt. with antioxidant 59756-60-4D, Fluridone, mixt. with antioxidant 60207-90-1D, Propiconazole, mixt. with antioxidant 60207-93-4D, ETaconazole, mixt. with antioxidant 61213-25-0D, mixt. with antioxidant 61432-55-1D, Dimepiperate, mixt. with antioxidant 63843-89-0D, Tinuvin 144, mixt. with pesticide 63935-38-6D, (Cycloprothrin, mixt. with antioxidant 64249-01-0D, Anilofos, mixt. with antioxidant 64902-72-3D, Chlorsulfuron, mixt. with antioxidant 66063-05-6D, Pencycuron, mixt. with antioxidant 66230-04-4D, (Esfenvalerate, mixt. with antioxidant 66246-88-6D, Penconazole, mixt. with antioxidant 67129-08-2D, Metazachlor, mixt. with antioxidant 67306-00-7D, FEnpropidine, mixt. with antioxidant 67375-30-8D, (Alphacypermethrin, mixt. with antioxidant 67564-91-4D, FEnpropimorph, mixt. with antioxidant 67747-09-5D, Prochloraz, mixt. with antioxidant 68049-83-2D, Azafenidin, mixt. with antioxidant 68085-85-8D, (Cyhalothrin, mixt. with antioxidant 68359-37-5D, Cyfluthrin, mixt. with antioxidant 68505-69-1D, Benfuresate, mixt. with antioxidant 68694-11-1D, Triflumizole, mixt. with antioxidant 69377-81-7D, Fluroxypyr, mixt. with antioxidant 69770-45-2D, (Flumethrin, mixt. with antioxidant 69806-34-4D, Haloxypop, mixt. with antioxidant 69806-50-4D, Fluazifopbutyl, mixt. with antioxidant 70248-65-6D, Methionine sulfoxide reductase, mixt. with pesticide 70630-17-0D, R-Metalaxyl, mixt. with antioxidant 71239-70-8D, Cellotetraosylsitosterol, mixt. with pesticide 71283-80-2D, mixt. with antioxidant 71561-11-0D, Pyrazoxyfen, mixt. with antioxidant 71626-11-4D, Benalaxyl, mixt. with antioxidant 71697-59-1D, (Theta cypermethrin, mixt. with antioxidant 72178-02-0D, Fomesafen, mixt. with antioxidant 72459-58-6D, Triazoxide, mixt. with antioxidant 72963-72-5D, Imiprothrin, mixt. with antioxidant 73250-68-7D, Mefenacet, mixt. with antioxidant 73989-17-0D, Avermectin, mixt. with antioxidant 74051-80-2D, Sethoxydim, mixt. with antioxidant 74070-46-5D, Aclonifen, mixt. with antioxidant 74223-64-6D, Metsulfuronmethyl, mixt. with antioxidant 74712-19-9D, Bromobutide, mixt. with antioxidant 74738-17-3D, Fenpiclonil, mixt. with antioxidant 76578-12-6D, Quizalofop, mixt. with antioxidant 76674-21-0D, Flutriafol, mixt. with antioxidant 77182-82-2D, Glufosinateammonium, mixt. with antioxidant 77501-63-4D, Lactofen, mixt. with antioxidant 77501-90-7D, **Fluoroglycofenethyl**, mixt. with antioxidant 77732-09-3D, Oxadixyl, mixt. with antioxidant 79241-46-6D, mixt. with

antioxidant 79277-27-3D, Thifensulfuronmethyl, mixt. with
antioxidant 79540-50-4D, Etobenzanid, mixt. with antioxidant
79983-71-4D, Hexaconazole, mixt. with antioxidant 81334-34-1D,
Imazapyr, mixt. with antioxidant 81335-37-7D, Imazaquin, mixt.
with antioxidant 81335-77-5D, Imazethapyr, mixt. with antioxidant
81405-85-8D, Imazamethabenzmethyl, mixt. with antioxidant
81412-43-3D, Tridemorph, mixt. with antioxidant 81777-89-1D,
Clomazone, mixt. with antioxidant 82097-50-5D, Triasulfuron, mixt.
with antioxidant 82558-50-7D, Isoxaben, mixt. with antioxidant
82657-04-3D, Bifenthrin, mixt. with antioxidant 82692-44-2D,
,Benzofenap, mixt. with antioxidant 83055-99-6D,
Bensulfuronmethyl, mixt. with antioxidant 83164-33-4D,
Diflufenican, mixt. with antioxidant 83657-24-3D, Diniconazole,
mixt. with antioxidant 84087-01-4D, Quinclorac, mixt. with
antioxidant 84496-56-0D, Clomeprop, mixt. with antioxidant
85509-19-9D, Flusilazole, mixt. with antioxidant 85785-20-2D,
Esprocarb, mixt. with antioxidant 86209-51-0D,
Primisulfuronmethyl, mixt. with antioxidant 86763-47-5D,
Propisochlor, mixt. with antioxidant 87392-12-9D, S-Metolachlor,
mixt. with antioxidant 87546-18-7D, Flumicloracpenty, mixt. with
antioxidant 87674-68-8D, Dimethenamid, mixt. with antioxidant
87818-31-3D, Cinmethylin, mixt. with antioxidant 87820-88-0D,
Tralkoxydim, mixt. with antioxidant 87833-54-3D, mixt. with
pesticide 88283-41-4D, ,Pyrifenox, mixt. with antioxidant
88671-89-0D, Myclobutanil, mixt. with antioxidant 88678-67-5D,
Pyributicarb, mixt. with antioxidant 89624-19-1D, Irganox, mixt.
with pesticide 90134-59-1D, Flamprop-M, mixt. with antioxidant
90524-93-9D, mixt. with pesticide 90717-03-6D, Quinmerac, mixt.
with antioxidant 90982-32-4D, Chlorimuronethyl, mixt. with
antioxidant 93697-74-6D, Pyrazosulfuronethyl, mixt. with
antioxidant 94051-08-8D, Quizalof op-P, mixt. with antioxidant
94125-34-5D, ,Prosulfuron, mixt. with antioxidant 94361-06-5D,
Cyproconazole, mixt. with antioxidant 94593-91-6D, Cinosulfuron,
mixt. with antioxidant 96491-05-3D, Thenylchlor, mixt. with
antioxidant 96525-23-4D, Flurtamone, mixt. with antioxidant
97780-06-8 97886-45-8D, Dithiopyr, mixt. with antioxidant
98967-40-9D, Flumetsulam, mixt. with antioxidant 99105-77-8D,
Sulcotrione, mixt. with antioxidant 99129-21-2D, Clethodim, mixt.
with antioxidant 99485-76-4D, Cumyluron, mixt. with antioxidant
100784-20-1D, Halosulfuronmethyl, mixt. with antioxidant
101007-06-1D, Acrinathrin, mixt. with antioxidant 101018-70-6D,
,2-Methyl-4-(dimethylaminomethyl)-5-hydroxybenzimidazole, mixt. with
pesticide 101200-48-0D, Tribenuronmethyl, mixt. with antioxidant
101205-02-1D, Cycloxydim, mixt. with antioxidant 103361-09-7D,
Flumioxazin, mixt. with antioxidant 104040-78-0D, Flazasulfuron,
mixt. with antioxidant 104098-48-8D, IMazapic, mixt. with
antioxidant 104206-82-8D, MESotrione, mixt. with antioxidant
104459-82-7D, AKH-7088, mixt. with antioxidant 105512-06-9D,

Clodinafoppropargyl, mixt. with antioxidant 107534-96-3D,
Tebuconazole, mixt. with antioxidant 108173-90-6D, Guazatine,
mixt. with antioxidant 109293-97-2D, Diflufenzopyr, mixt. with
antioxidant 110488-70-5D, Dimethomorph, mixt. with antioxidant
110956-75-7D, Pentoxazone, mixt. with antioxidant 111479-05-1D,
PRopaquizafof, mixt. with antioxidant 111578-32-6D, Metobenzuron,
mixt. with antioxidant 112143-82-5D, Triazamate, mixt. with
antioxidant 112226-61-6D, mixt. with antioxidant 112281-77-3D,
Tetraconazole, mixt. with antioxidant 113614-08-7D, Beflubutamid,
mixt. with antioxidant 114311-32-9D, Imazamox, mixt. with
antioxidant 114369-43-6D, Fenbuconazole, mixt. with antioxidant
116255-48-2D, Bromuconazole, mixt. with antioxidant 117337-19-6D,
Fluthiacetmethyl, mixt. with antioxidant 117428-22-5D, ZEN90160,
mixt. with antioxidant 117718-60-2D, Thiazopyr, mixt. with
antioxidant 118134-30-8D, SPiroxamine, mixt. with antioxidant
118712-89-3D, Transfluthrin, mixt. with antioxidant 119168-77-3D,
Tebufenpyrad, mixt. with antioxidant 119446-68-3D, Difenconazole,
mixt. with antioxidant 120068-37-3D, Fipronil, mixt. with
antioxidant 120162-55-2D, Azimsulfuron, mixt. with antioxidant
120923-37-7D, Amidosulfuron, mixt. with antioxidant 121552-61-2D,
Cyprodinil, mixt. with antioxidant 122008-85-9D, Cyhalofopbutyl,
mixt. with antioxidant 122548-33-8D, Imazosulfuron, mixt. with
antioxidant 122931-48-0D, Rimsulfuron, mixt. with antioxidant
123343-16-8D, Pyriethiobacsodium, mixt. with antioxidant
124495-18-7D, Quinoxifen, mixt. with antioxidant 125116-23-6D,
Metconazole, mixt. with antioxidant 125306-83-4D, Cafenstrole,
mixt. with antioxidant 125401-92-5D, Bispyriethiobacsodium, mixt. with
antioxidant 126535-15-7D, Trifluthiobacsodium, mixt. with
antioxidant 126801-58-9D, Ethoxysulfuron, mixt. with antioxidant
128639-02-1D, Carfentrazoneethyl, mixt. with antioxidant
129630-19-9D, Pyraflufen-ethyl, mixt. with antioxidant
129909-90-6D, Amicarbazone, mixt. with antioxidant 131086-42-5D,
,HC-252; mixt. with antioxidant 131341-86-1D, Fludioxonil, mixt.
with antioxidant 131475-57-5D, Triaziflam, mixt. with antioxidant
131807-57-3D, ,Famoxadone, mixt. with antioxidant 131860-33-8D,
Azoxystrobin, mixt. with antioxidant 131983-72-7D, Triticonazole,
mixt. with antioxidant 133220-30-1D, Indanofan, mixt. with
antioxidant 134605-64-4D, Butafenacil, mixt. with antioxidant
135158-54-2, Acibenzolar-S-methyl 135410-20-7D, Acetamiprid, mixt.
with antioxidant 136426-54-5D, Fluquinconazole, mixt. with
antioxidant 136849-15-5D, Cyclosulfamuron, mixt. with antioxidant
137641-05-5D, Picolinafen, mixt. with antioxidant 138164-12-2D,
Butoxydim, mixt. with antioxidant 139001-49-3D, BAS 625 H, mixt.
with antioxidant 139528-85-1D, Metosulam, mixt. with antioxidant
141112-29-0D, Isoxaflutole, mixt. with antioxidant 141776-32-1D,
Sulfosulfuron, mixt. with antioxidant 142459-58-3D, FLufenacet,
mixt. with antioxidant 142891-20-1D, Cinidonethyl, mixt. with
antioxidant 143390-89-0D, Kresoximmethyl, mixt. with antioxidant

144550-36-7D, Iodosulfuronmethylsodium, mixt. with antioxidant
 144651-06-9D, Oxasulfuron, mixt. with antioxidant 144740-54-5D,
 Flupyralsulfuronmethylsodium, mixt. with antioxidant 145701-21-9D,
 Diclosulam, mixt. with antioxidant 145701-23-1D, Florasulam, mixt.
 with antioxidant 147150-35-4D, ,Cloransulammethyl, mixt. with
 antioxidant 147411-69-6D, Pyriminobacmethyl, mixt. with
 antioxidant 149508-90-7D, Simeconazole, mixt. with antioxidant
 149979-41-9D, Tepraloxym, mixt. with antioxidant 150035-60-2D,
 mixt. with pesticide 150824-47-8D, Nitenpyram, mixt. with
 antioxidant 153719-22-3D, mixt. with antioxidant 153719-23-4D,
 Thiamethoxam, mixt. with antioxidant

(seed and plant treatment compn. to improve germination, plant
 health and yield)

L57 ANSWER 2 OF 38 HCA COPYRIGHT 2005 ACS on STN

141:354863 Cleansing sensitive skin using an alkanolamine. Cole, Curtis
 A.; Aleles, Margaret; Lukenbach, Elvin; Skover, Greg; Barkovic,
 Sylvia; Shah, Snehal; Campoblanco, Blanca; Appa, Yohini (USA). U.S.
 Pat. Appl. Publ. US 2004213754 A1 20041028, 10 pp., Cont.-in-part of
 U.S. Ser. No. 961,911. (English). CODEN: USXXCO. APPLICATION: US
 2004-764856 20040126. PRIORITY: US 2000-PV237230 20001002; US
 2000-742622 20001221; US 2001-961911 20010924.

AB A method of simultaneously cleansing the skin and reducing skin
 sensitivity and/or skin reactivity comprises topically applying a
 skin cleanser compn. comprising: (a) an effective amt. of an
 alkanolamine, (b) a cleansing surfactant; and (c) water. In another
 embodiment, the invention relates to a method for ameliorating
 redness or inflammation of mammalian skin by topically applying the
 above skin cleanser compn. A compn. contained decyl glucoside,
 ammonium laureth sulfate, cocamide DEA, cocamidopropylbetaine, DMDM
 hydantoin, and dimethylaminoethanol in addn. to other ingredients.

IT 108-01-0, 2-Dimethylaminoethanol

(cleansing sensitive skin using an alkanolamine)

RN 108-01-0 HCA

CN Ethanol, 2-(dimethylamino)- (8CI, 9CI) (CA INDEX NAME)

$\text{Me}_2\text{N}-\text{CH}_2-\text{CH}_2-\text{OH}$

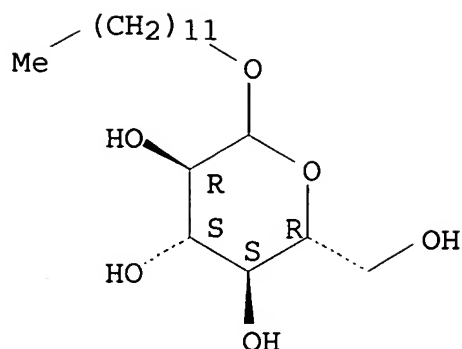
IT 27836-64-2, Lauryl glucoside 58846-77-8, Decyl
 glucoside

(cleansing sensitive skin using an alkanolamine)

RN 27836-64-2 HCA

CN D-Glucopyranoside, dodecyl (9CI) (CA INDEX NAME)

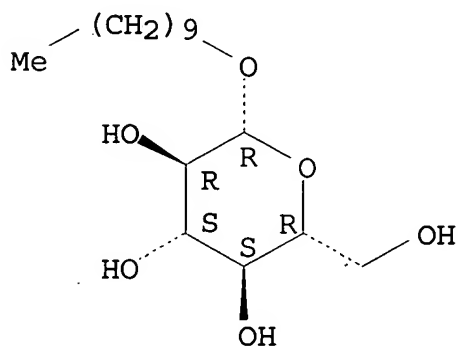
Absolute stereochemistry.



RN 58846-77-8 HCA

CN .beta.-D-Glucopyranoside, decyl (9CI) (CA INDEX NAME)

Absolute stereochemistry.



IC ICM A61K007-075

ICS A61K007-08

INCL 424070270

CC 62-4 (Essential Oils and Cosmetics)

IT 56-45-1, Serine, biological studies 62-49-7, Choline 78-96-6,
Isopropanolamine 96-20-8 102-71-6, Triethanolamine, biological
studies 108-01-0, 2-Dimethylaminoethanol 108-16-7
109-83-1, 2-Methylaminoethanol 110-73-6, 2-Ethylaminoethanol
(cleansing sensitive skin using an alkanolamine)

IT 50-99-7D, D-Glucose, C16-18 alkyl esters 57-50-1D, Sucrose, coco
acyl and stearate esters 683-10-3, Lauryl betaine 4316-73-8D,
Sodium sarcosinate, N-coco acyl derivs. 9002-92-0, Laureth 4
9004-98-2, Oleth 2 24938-91-8, Trideceth 9 26266-58-0, Sorbitan
trioleate 27836-64-2, Lauryl glucoside 32612-48-9,
Ammonium laureth sulfate 36574-66-0D, N-coco acyl derivs.
37220-82-9, Glyceryl oleate 37318-31-3, Sucrose stearate
56451-84-4, Sorbitan stearate 58846-77-8, Decyl glucoside
69364-63-2, Isoceteth 20 72175-39-4, Glucamate SSE-20

106392-12-5, Poloxamer 184 122703-32-6, Glucate DO
(cleansing sensitive skin using an alkanolamine)

L57 ANSWER 3 OF 38 HCA COPYRIGHT 2005 ACS on STN

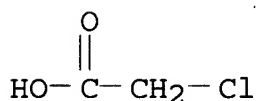
141:73323 Manufacture of carboxylate products of alkyl or alkenyl **oligoglycosides** as anionic surfactants. Behler, Ansgar; Folge, Almud (Cognis Deutschland GmbH & Co. Kg, Germany). Ger. Offen. DE 10259403 A1 20040701, 4 pp. (German). CODEN: GWXXBX. APPLICATION: DE 2002-10259403 20021219.

AB A new procedure for the prodn. of aq. pastes of alkyl and/or **alkenyloligoglycoside** carboxylic acid salts with decreased content of org. chlorine compds. is described. The process is characterized by the fact that the conversion of the alkyl and/or **alkenyloligoglycosides** in actually known method into halogenated carboxylic acids or their salts at 50-120.degree. of.

IT 79-11-8DP, reaction product with Plantapon LGC
(carboxylate products of alkyl or alkenyl **oligoglycosides** as anionic surfactants)

RN 79-11-8 HCA

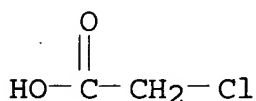
CN Acetic acid, chloro- (8CI, 9CI) (CA INDEX NAME)



IT 79-11-8, reactions
(carboxylate products of alkyl or alkenyl **oligoglycosides** as anionic surfactants)

RN 79-11-8 HCA

CN Acetic acid, chloro- (8CI, 9CI) (CA INDEX NAME)



IC ICM C07H015-04

ICS C07H001-06

CC 45-4 (Industrial Organic Chemicals, Leather, Fats, and Waxes)
Section cross-reference(s): 33

ST alkyl alkenyl **oligoglycosides** carboxylaton product manuf
anionic surfactants

IT Glycosides

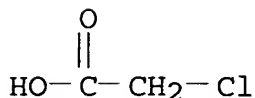
(alkenyl **oligoglycosides**; carboxylate products of alkyl
or alkenyl **oligoglycosides** as anionic surfactants)

IT Glycosides

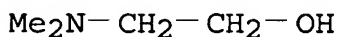
(alkyl **oligoglycosides**; carboxylate products of alkyl

- or alkenyl **oligoglycosides** as anionic surfactants)
- IT Surfactants
(anionic; carboxylate products of alkyl or alkenyl **oligoglycosides** as anionic surfactants)
- IT Carboxylic acids, preparation
(salts; carboxylate products of alkyl or alkenyl **oligoglycosides** as anionic surfactants)
- IT 79-11-8DP, reaction product with Plantapon LGC 79-43-6DP, reaction product with Plantapon LGC 104243-97-2DP, reaction product with monochloroacetate and dichloroacetate
(carboxylate products of alkyl or alkenyl **oligoglycosides** as anionic surfactants)
- IT 79-11-8, reactions 79-43-6, reactions 104243-97-2
(carboxylate products of alkyl or alkenyl **oligoglycosides** as anionic surfactants)
- Applicant's priority document*
- L57 ANSWER 4 OF 38 HCA COPYRIGHT 2005 ACS on STN
- 139:119047 Manufacture of alkyl- and/or alkenyl **oligoglycoside betaine esterquats** as emulsifiers, hair conditioners and rinse aids. Behler, Ansgar; Clasen, Frank (Cognis Deutschland GmbH & Co. Kg, Germany). PCT Int. Appl. WO 2003059298 A1 20030724, 16 pp. DESIGNATED STATES: W: JP, US; RW: AT, BE, CH, CY, DE, DK, ES, FI, FR, GB, GR, IE, IT, LU, MC, NL, PT, SE, TR. (German). CODEN: PIXXD2. APPLICATION: WO 2003-EP62 20030107. PRIORITY: DE 2002-10201354 20020116.
- AB R10(G)nOCOCR2R3NR4R5R6 [R1 = C4-22 alk(en)yl; R2 = H, Me; R3 = H, C1-6 linear and/or branched alk(en)yl; R4-R6 = C1-24 linear and/or branched (hydroxy)alkyl, (hydroxy)alkenyl; G = C5-6 sugar residue; n = 1-10], environmentally friendly surfactants useful for the title purpose, are manufd. by esterification of alkyl- and/or alkenyl **oligoglycosides** R10(G)n (R1, G, n as above) with halocarboxylic acids XCR2R3CO2H (X = halo; R2, R3 as above) followed by quaternization of the resulting esters with tertiary **amines** NR4R5R6. For example, heating 214.0 g Plantacare 1200UP with 61.4 g ClCH2CO2H at 115-120.degree. in 250 mL PhMe with sepn. of H2O gave, after 11.25 h, 513.4 g dark yellow liq. product having acid no. 19.0 and sapon. no 158.0. Heating 29.0 g of the latter product with 27.6 g Me2NCH2CH2OH for 1.25 h at 80.degree. in 220 g PhMe gave a title surfactant.
- IT 79-11-8DP, Chloroacetic acid, esters with alkyl **oligoglycosides**, quaternized 108-01-0DP, N,N-Dimethylethanolamine, quaternization products with alkyl **oligoglycoside** chloroacetate esters 219686-82-5DP, Plantacare 1200UP, chloroacetate **esters**, **quaternized**
(surfactants; manuf. of alkyl- and/or alkenyl **oligoglycoside betaine esterquats** as emulsifiers, hair conditioners and rinse aids)

RN 79-11-8 HCA
CN Acetic acid, chloro- (8CI, 9CI) (CA INDEX NAME)



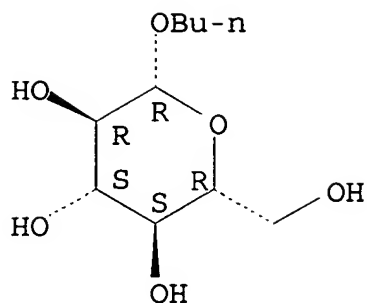
RN 108-01-0 HCA
CN Ethanol, 2-(dimethylamino)- (8CI, 9CI) (CA INDEX NAME)



RN 219686-82-5 HCA
CN Plantacare 1200UP (9CI) (CA INDEX NAME)
*** STRUCTURE DIAGRAM IS NOT AVAILABLE ***
IC ICM A61K007-06
ICS C07H015-00
CC 46-3 (Surface Active Agents and Detergents)
ST **alkyl oligoglycoside betaine esterquat**
surfactant manuf; chloroacetic acid esterification alkyl
oligoglycoside surfactant manuf; quaternization
dimethylethanolamine alkyl oligoglycoside
chloroacetate ester surfactant manuf
IT Surfactants
(cationic; manuf. of. alkyl- and/or alkenyl
oligoglycoside betaine esterquats as)
IT Detergents
(cleaning compns.; manuf. of. alkyl- and/or alkenyl
oligoglycoside betaine esterquat
surfactants for use in)
IT Hair preparations
(conditioners; manuf. of. alkyl- and/or alkenyl
oligoglycoside betaine esterquat
surfactants for use in)
IT Quaternary ammonium compounds, uses
(manuf. of. alkyl- and/or alkenyl **oligoglycoside**
betaine esterquat surfactants)
IT **Betaines**
(manuf. of. alkyl- and/or alkenyl **oligoglycoside**
betaine esterquat surfactants)
IT Emulsifying agents
(manuf. of. alkyl- and/or alkenyl **oligoglycoside**
betaine esterquat surfactants for use in)
IT Detergents
(rinse aids; manuf. of. alkyl- and/or alkenyl
oligoglycoside betaine esterquat

- surfactants for use in)
- IT 79-11-8DP, Chloroacetic acid, esters with alkyl oligoglycosides, quaternized 108-01-0DP, N,N-Dimethylethanolamine, quaternization products with alkyl oligoglycoside chloroacetate esters 219686-82-5DP, Plantacare 1200UP, chloroacetate esters, quaternized (surfactants; manuf. of alkyl- and/or alkenyl oligoglycoside betaine esterquats as emulsifiers, hair conditioners and rinse aids)
- L57 ANSWER 5 OF 38 HCA COPYRIGHT 2005 ACS on STN
- 137:206215 Liquid thickener for cosmetic surfactant systems. Polovsky, Stuart Barry; Barbeito, Carmella; Li, Wing Kin; Diantonio, Edward F.; Kreeger, Russell Lowell (USA). U.S. Pat. Appl. Publ. US 2002123625 A1 20020905, 8 pp. (English). CODEN: USXXCO. APPLICATION: US 2000-741514 20001220.
- AB Compns. comprising alkoxylated lipophilic polyol compds., e.g., ethoxylated, esterified Me glucosides, are disclosed wherein at least 5% of the polyol derivs. have about three moles of the lipophilic substituent/mol of polyol. Quite advantageously, the disclosed polyol derivs. can be dissolved into aq. solns. to provide liq. thickeners suitable for thickening surfactant-contg. compns., e.g., shampoos, at cold processing temps. PEG-100 Me glucoside trioleate was prepd. by the reaction of PEG Me glucoside (Glucam E-20) with Me oleate in the presence of Tyzor as a catalyst. A PEG-100 Me glucoside trioleate-propylene glycol-water blend was prepd. and 0.50% this blend was added to a body cleansing formulation contg. Polyquaternium -10 0.20, Na laureth sulfate 40.00, cocoamidopropyl betaine 11.50, disodium laureth sulfosuccinate 5.00, DMDM hydantoin 0.40 and water qs to 100%.
- IT 5391-18-4D, Butyl glucoside, alkoxylated 66957-71-9D, Amyl .beta.-D-Glucopyranoside, alkoxylated (liq. thickeners for cosmetic surfactant systems)
- RN 5391-18-4 HCA
- CN .beta.-D-Glucopyranoside, butyl (9CI) (CA INDEX NAME)

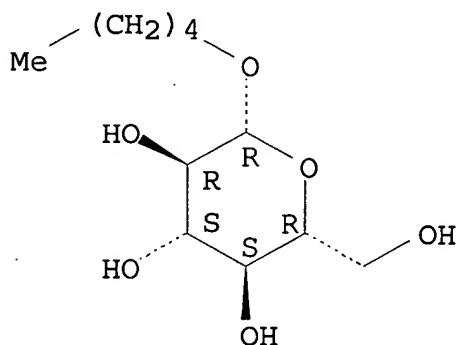
Absolute stereochemistry. Rotation (-).



RN 66957-71-9 HCA

CN .beta.-D-Glucopyranoside, pentyl (9CI) (CA INDEX NAME)

Absolute stereochemistry. Rotation (-).



IC ICM A61K007-075

ICS C07H015-04

INCL 536120000

CC 62-4 (Essential Oils and Cosmetics)

IT 50-70-4D, Sorbitol, alkoxyated 50-99-7D, Glucose, alkoxyated
 derivs. 56-81-5D, Glycerol, alkoxyated 3149-68-6D, Methyl
 glucoside, alkoxyated 5391-18-4D, Butyl glucoside,
 alkoxyated 34384-77-5D, alkoxyated 34625-23-5D, Ethyl
 glucoside, alkoxyated 66957-71-9D, Amyl
 .beta.-D-Glucopyranoside, alkoxyated 86893-19-8, Glucamate
 DOE-120

(liq. thickeners for cosmetic surfactant systems)

L57 ANSWER 6 OF 38 HCA COPYRIGHT 2005 ACS on STN

137:37390 Skin cleanser containing anti-aging active containing
 alkanolamines. Cole, Curtis A.; Lukenbach, Elvin R.; Aleles,
 Margaret A. (USA). U.S. Pat. Appl. Publ. US 20020071818 A1
 20020613, 11 pp., Cont.-in-part of U.S. Ser. No. 742,622.
 (English). CODEN: USXXCO. APPLICATION: US 2001-961911 20010924.

PRIORITY: US 2000-PV237230 20001002; US 2000-742622 20001221.

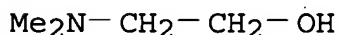
AB The invention relates to a method of simultaneously cleansing the skin and providing an anti-aging skin benefit selected from the group consisting of skin firming, skin contouring, reducing the appearance of sagging skin, and skin tightening. The method comprises topically applying a skin cleanser compn. comprising: (a) an alkanolamine; (b) a cleansing surfactant; and (c) water. The skin cleanser compns. of the invention can be used as a 2-in-1 compn. that simultaneously cleanses the skin and improves skin firmness and/or provides the skin with lifting benefits giving the user a fresh/alert appearance readily perceived by others. A compn. contained dimethylaminoethanol premix and many other additives.

IT 108-01-0, Dimethylaminoethanol

(skin cleanser contg. anti-aging active contg. alkanolamines)

RN 108-01-0 HCA

CN Ethanol, 2-(dimethylamino)- (8CI, 9CI) (CA INDEX NAME)



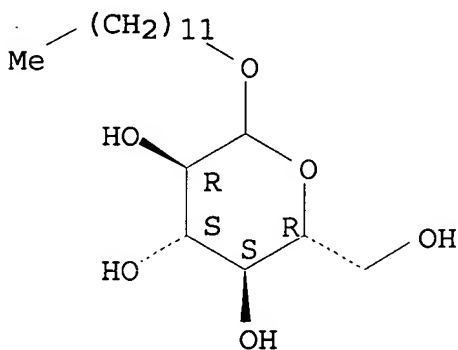
IT 27836-64-2, Lauryl glucoside 58846-77-8, Decyl glucoside

(skin cleanser contg. anti-aging active contg. alkanolamines)

RN 27836-64-2 HCA

CN D-Glucopyranoside, dodecyl (9CI) (CA INDEX NAME)

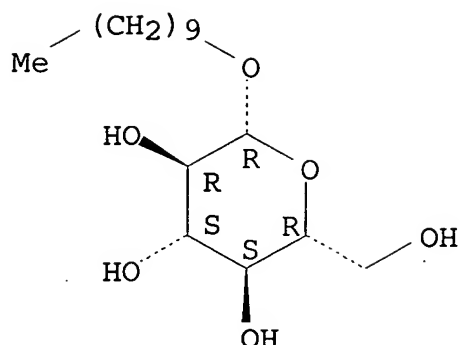
Absolute stereochemistry.



RN 58846-77-8 HCA

CN .beta.-D-Glucopyranoside, decyl (9CI) (CA INDEX NAME)

Absolute stereochemistry.



IC ICM A61K007-06

INCL 424070100

CC 62-4 (Essential Oils and Cosmetics)

IT 56-45-1, Serine, biological studies 62-49-7, Choline 78-96-6;
Isopropanolamine 96-20-8 102-71-6, Triethanolamine, biological
studies **108-01-0**, Dimethylaminoethanol 109-83-1,
Methylaminoethanol 110-73-6 996-35-0, Isopropyldimethylamine
(skin cleanser contg. anti-aging active contg. alkanolamines)

IT 57-50-1D, Sucrose, coco acyl esters 107-43-7, Betaine 9002-92-0,
Laureth 4 9004-98-2, Oleth 2 24938-91-8, Trideceth 25496-72-4,
Glyceryl oleate 26266-58-0, Sorbitan trioleate **27836-64-2**
, Lauryl glucoside 32612-48-9, Ammonium laureth sulfate
36574-66-0D, N-coco acyl derivs. 37318-31-3, Sucrose stearate
56451-84-4, Sorbitan stearate **58846-77-8**, Decyl glucoside
69364-63-2, Isoceteth 20 72175-39-4, Glucamate SSE-20
106392-12-5, Poloxamer 184 122703-32-6, Glucate DO
(skin cleanser contg. anti-aging active contg. alkanolamines)

L57 ANSWER 7 OF 38 HCA COPYRIGHT 2005 ACS on STN

136:212050 The red blood cell test predicting the eye irritation
potential of surfactants. Borgmann-Strahsen, Renate; Denzer, Horst;
Domsch, Andreas; Drechsel, Peter; Hensen, Hermann; Irrgang,
Bernhard; Martin, Volker; Pape, Wolfgang; Pfannenbecker, Uwe;
Siebert, Joerg; Steiling, Winfried; Turowski-Wanke, Angelika;
Ungeheuer, Peter; Wollenweber, Ute; Zimmermann, Frank (Akzo Nobel,
Germany). World Surfactants Congress, 5th, Firenze, Italy, May
29-June 2, 2000, 1524-1533. Comit  Europeen des Agents de Surface
et leurs Intermediaires Organiques: Brussels, Belg. (English) 2000.
CODEN: 69BYUW.

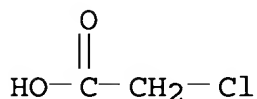
AB The Red Blood Cell Assay (RBC test) is a well known in vitro test
system for the assessment of irritation potential to mucous
membranes. The effects on erythrocytes' membranes are related to
the irritation potential of the test substance. In this study in
vitro RBC test data were compared with existing Draize rabbit eye
test data, specifically for surfactants (anionics, amphoteric,

cationics and nonionics). The goal of this study was to analyze if the H50 value is strong enough to predict four defined irritation categories. For that numerous surfactants were evaluated with the standardized RBC test. This data was compared with existing in vivo data. The in vitro RBC test data is supportive to distinguish between slightly irritating and irritating surfactants, for which labeling as an irritating or severely irritating is required. The in vitro RBC test is appropriate for screening purposes to assoc. water-sol. surfactants with two groups, one for which labeling with the R-phrases R36/R41 is required and one without such severe irritation hazard.

IT 79-11-8D, reaction products with N-(C10-16-alkyl)
trimethylenediamines 27836-64-2, Lauryl glucoside
(red blood cell test predicting eye irritation potential of
surfactants)

RN 79-11-8 HCA

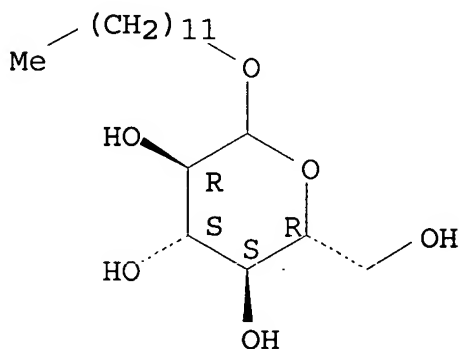
CN Acetic acid, chloro- (8CI, 9CI) (CA INDEX NAME)



RN 27836-64-2 HCA

CN D-Glucopyranoside, dodecyl (9CI) (CA INDEX NAME)

Absolute stereochemistry.



CC 4-3 (Toxicology)
Section cross-reference(s): 46, 62

IT **Betaines**
(coco alkyldimethyl; red blood cell test predicting eye
irritation potential of surfactants)

IT 79-11-8D, reaction products with N-(C10-16-alkyl)
trimethylenediamines 109-76-2D,
Trimethylenediamine, N-(C10-16-alkyl) derivs., reaction

products with monochloroacetate 112-02-7, Cetrimonium chloride 151-21-3, Sodium lauryl sulfate, biological studies 151-21-3D, Sodium lauryl sulfate, mixt. with disodium PEG-4 cocamido monoisopropanolamide sulfosuccinate and cocamidopropyl **betaine** 928-72-3D, carboxymethyl **cocopropylamine** derivs. 928-72-3D, carboxymethyl **tallowpropylamine** derivs. 1562-00-1D, Sodium isethionate, coco ester derivs. 9004-82-4, Sodium laureth sulfate **27836-64-2**, Lauryl glucoside 33939-64-9, Sodium laureth-11 carboxylate 36574-66-0D, N-coco acyl derivs. 36574-66-0D, N-coco acyl derivs., mixt. with sodium lauryl sulfate and disodium PEG-4 cocamido monoisopropanolamide 51277-96-4, Palmitamidopropyl trimonium chloride 53171-04-3, Lauroyl PG trimonium chloride 58450-52-5, Disodium laureth sulfosuccinate 73772-45-9 73772-46-0 86880-59-3D, N-coco acyl derivs. 138185-82-7, Rewopol SB Z 138185-82-7D, Rewopol SB Z, mixt. with sodium lauryl sulfate and cocamidopropyl **betaine** 152442-91-6, Akypo-Soft KA 250BVC 164458-73-5, Disodium PEG-5 lauryl citrate sulfosuccinate 402820-21-7 402820-22-8 402824-48-0

(red blood cell test predicting eye irritation potential of surfactants)

L57 ANSWER 8 OF 38 HCA COPYRIGHT 2005 ACS on STN

135:81805 Preparation and use of nanoscale cationic compounds for cosmetic and pharmaceutical compositions. Hensen, Hermann; Eggers, Anke; Kahre, Joerg; Boettcher, Axel (Cognis Deutschland G.m.b.H., Germany). PCT Int. Appl. WO 2001045666 A1 20010628, 34 pp. DESIGNATED STATES: W: JP, KR, US; RW: AT, BE, CH, CY, DE, DK, ES, FI, FR, GB, GR, IE, IT, LU, MC, NL, PT, SE, TR. (German). CODEN: PIXXD2. APPLICATION: WO 2000-EP12655 20001213. PRIORITY: DE 1999-19961939 19991222.

AB The invention relates to the use of nanoscale, cationic compds. with particle diams. of between 10 and 300 nm for producing cosmetic and pharmaceutical prepns., as well as fabric softeners. Nanoscale cationic compds. are prepd. from supercrit. solns. by rapid expansion spraying into a protective colloid-contg. soln. Cationic compds. are **esterquats** and cationic polymers and copolymers, e.g. cellulose and starch derivs., polyvinylpyrrolidon, collagen, polyacrylates. Thus Dehyquart A-CA nanoparticles were prepd. from supercrit. carbon dioxide soln. unsing a laser nozzle and a plexi glass expansion chamber contg. 4 % aq. PEG-400. The Dehyquart A-CA nanoparticles were used in a hair rinsing compn. that contained (wt./wt.%): Dehyquart A-CA 0.2; Dehyquart A 2.0; Dehyquart L80 1.2; Eumulgin B2 0.8; Lanette O 2.5; Cutina GMS 0.5; Cetiol HE 1.0; Hydagen CMF 1.0; preservative, water to 100.

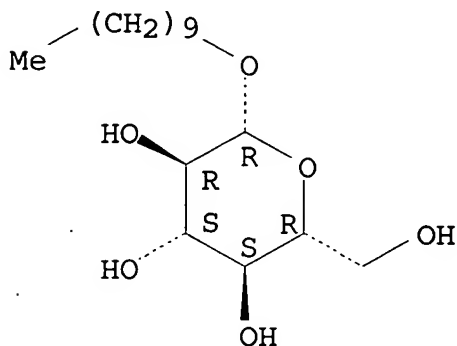
IT **58846-77-8**, Plantacare 818

(prepn. and use of nanoscale cationic compds. for cosmetic and pharmaceutical compns.)

RN 58846-77-8 HCA

CN .beta.-D-Glucopyranoside, decyl (9CI) (CA INDEX NAME)

Absolute stereochemistry.



IC ICM A61K007-50

ICS C11D003-00; C11D001-62

CC 62-3 (Essential Oils and Cosmetics)

Section cross-reference(s): 46, 63

ST nanoscale cationic compd **esterquat** polymer cosmetic hair skinIT Quaternary ammonium compounds, biological studies
(**esterquats**; prepn. and use of nanoscale cationic compds. for cosmetic and pharmaceutical compns.)IT 112-02-7, Dehyquart A-CA 124-38-9, Carbon dioxide, biological studies 1398-61-4D, Chitin, cationic derivs. 3687-46-5, Cetirol V 5333-42-6, Eutanol G 9000-30-0, Guar gum 9002-98-6 9003-39-8, Polyvinylpyrrolidone 9004-34-6D, Cellulose, cationic derivs., biological studies 9004-82-4, Texapon NSO 9005-25-8D, Starch, cationic derivs., biological studies 25232-42-2, Polyvinylimidazole 31566-31-1, Cutina GMS 32208-04-1, Dehyquart F75 58450-52-5, Texapon SB3 **58846-77-8**, Plantacare 818 65497-29-2, Jaguar C-17 84563-77-9, Hydagen CMF 133184-01-7 178966-46-6, Euperlan PK 3000AM 179529-83-0, Lamesoft LMG 183291-15-8, Dehyton PK45 186322-48-5, Cetirol PGL 188571-05-3, Gluadin WQ 195889-53-3, Eumulgin VL 75 225659-54-1, Dehyquart L80 288150-38-9, Plantacare PS10

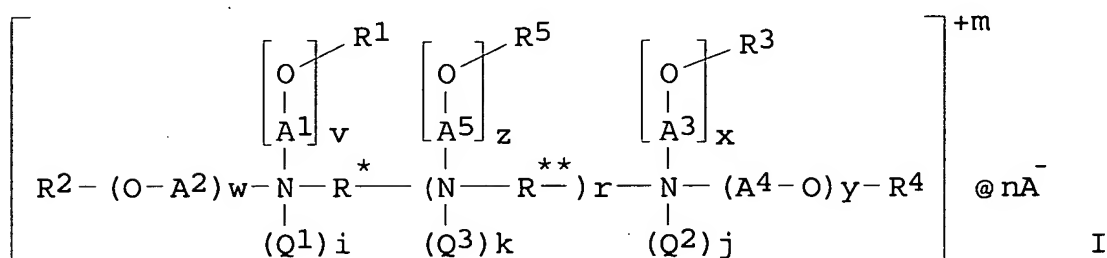
(prepn. and use of nanoscale cationic compds. for cosmetic and pharmaceutical compns.)

L57 ANSWER 9 OF 38 HCA COPYRIGHT 2005 ACS on STN

134:267694 Polyester polyquaternary compounds, compositions containing them, and use thereof as fabric softeners. Keys, Robert O.; Friedli, Floyd E.; Dalrymple, Damon M.; Manning, Monna; Poffenberger, Craig; Whittlinger, David E.; Hou, Wangqi (Goldschmidt Chemical Co., USA). U.S. US 6211139 B1 20010403, 30 pp.,

Cont.-in-part of U.S. Ser. No. 845,676, abandoned. (English).
 CODEN: USXXAM. APPLICATION: US 1998-170623 19981013. PRIORITY: US
 1996-638615 19960426; US 1997-845676 19970425.

GI



AB The title compn. comprises: (a) I: wherein each of R* and R** is independently a linear, branched or cyclic alkylene group contg. 2 to 12 carbon atoms, wherein no two nitrogen atoms are sepd. by fewer than 2 carbon atoms; each of A1, A2, A3, A4, and A5 is independently a straight or branched alkylene contg. 2 to 4 carbon atoms; each of R1, R2, R3, R4, and R5 is independently -H or RAC(O)- wherein RA is straight or branched alkyl or alkenyl contg. 7 to 21 carbon atoms and 0 to 4 carbon-carbon double bonds; provided that at least one of R1, R2, R3, R4, or R5 is RAC(O)-; each of Q1, Q2 and Q3 is independently -H, -CH3, -C2H5, -C3H7, -C4H5, benzyl, -CH2COOH, or -CH2COOA-; m is 0 to 4; r is 0 to 2; each of v, w, x, y, and z is independently 1 to 8; i is 0 to 1, j is 0 to 1, and each k is 0 to 1, and the sum of (i+j+k) is 0 to 4; each A- is independently an anion; and n is the no. of moles of A- needed to give the compd. of structural formula (1) a zero net charge; and (b) a second surfactant selected from the group consisting of anionic surfactants, cationic surfactants, zwitterionic surfactants, nonionic surfactants, amphoteric surfactants and blends thereof. A compd. was prepd. by reaction of hexamethylenediamine (II) with 4 mol ethylene oxide per mol II, reaction with tallow fatty acids, and quaternization with di-Me sulfate.

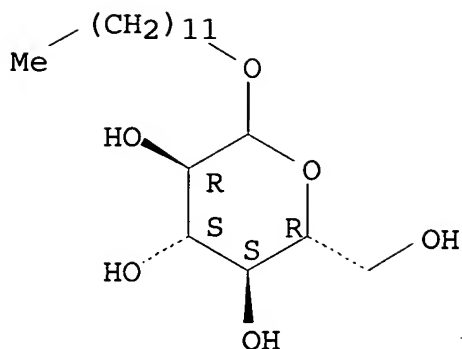
IT 27836-64-2, Lauryl glucoside 58846-77-8, Decyl glucoside

(polyester polyquaternary compds., compns. contg. them, and use thereof as fabric softeners)

RN 27836-64-2 HCA

CN D-Glucopyranoside, dodecyl (9CI) (CA INDEX NAME)

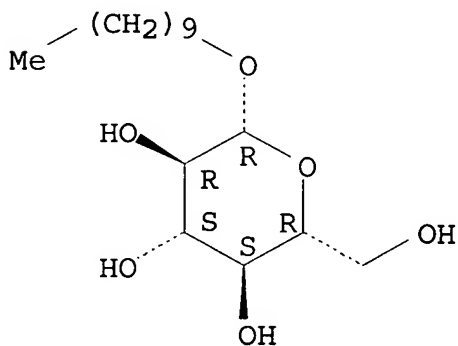
Absolute stereochemistry.



RN 58846-77-8 HCA

CN .beta.-D-Glucopyranoside, decyl (9CI) (CA INDEX NAME)

Absolute stereochemistry.



IC ICM C11D001-62

ICS C11D001-645; C11D001-65; C11D001-835

INCL 510504000

CC 40-9 (Textiles and Fibers)

Section cross-reference(s): 46

ST **quaternary ester** surfactant blend fabric softener

IT **Betaines**

(coco alkyl dimethyl; polyester polyquaternary compds., compns. contg. them, and use thereof as fabric softeners)

IT **Sulfobetaines**

(hydroxy, cocamidopropyl; polyester polyquaternary compds., compns. contg. them, and use thereof as fabric softeners)

IT **Sulfobetaines**

(hydroxy; polyester polyquaternary compds., compns. contg. them, and use thereof as fabric softeners)

IT **Betaines**

Carbohydrates, uses

Diglycerides

Monoglycerides

(polyester polyquaternary compds., compns. contg. them, and use thereof as fabric softeners)

IT 93-82-3, Stearamide DEA 93-83-4, Oleamide DEA 106-15-0
 106-16-1 111-05-7, Oleamide MIPA 111-57-9, Stearamide MEA
 111-58-0, Oleamide MEA 120-40-1, Lauramide DEA 139-96-8, TEA
 lauryl sulfate 142-26-7, Acetamide MEA 142-54-1, Lauramide MIPA
 142-58-5, Myristamide MEA 142-78-9, Lauramide MEA 151-21-3,
 Sodium lauryl sulfate, uses 544-31-0 683-10-3,
Laurylbetaine 820-66-6 1191-50-0, Sodium myristyl
 sulfate 1300-72-7, Sodium xylene sulfonate 1643-20-5, Lauramine
 oxide 2235-54-3, Ammonium lauryl sulfate 2530-44-1 2571-88-2
 2601-33-4 2605-79-0 3332-27-2, Myristamine oxide 4292-10-8,
Lauramidopropyl betaine 5422-34-4, Lactamide MEA
 6179-44-8 7128-91-8 7545-23-5, Myristamide DEA 7545-24-6
 9004-82-4, Sodium laureth sulfate 9016-45-9, Nonylphenol
 ethoxylate 10525-14-1 14350-97-1, Disodium lauroamphodiacetate
 14351-50-9 18738-25-5 20545-92-0, Undecylenamide MEA
 25066-20-0 25159-40-4 25322-68-3D, PEG, glyceryl, fatty acid
 esters 26447-10-9, Ammonium xylene sulfonate 26483-35-2
 26837-33-2 26920-62-7, **Behenylbetaine** 27233-34-7
 27323-41-7 27731-62-0, Sodium myristeth sulfate **27836-64-2**
 , Lauryl glucoside 32612-48-9, Ammonium laureth sulfate
 32954-43-1 35627-96-4, Stearamide MIPA 36574-66-0D, N-coco acyl
 derivs. 37340-69-5D, ethers, salts 40428-79-3 40716-42-5
 51515-71-0 52794-79-3, Isostearamide DEA 54536-43-5,
 Isostearamide MEA 56863-02-6 **58846-77-8**, Decyl glucoside
 59272-84-3, Myristamidopropyl **betaine** 61792-31-2
 63451-24-1 63663-10-5 63663-11-6 63663-12-7 64012-03-9
 64058-34-0 67799-05-7 67806-10-4 67806-12-6 68171-52-8
 68929-04-4 69868-14-0 70496-39-8 71850-81-2 94109-05-4
 138527-93-2 149879-98-1 152848-22-1 164118-71-2 230955-77-8
 230955-78-9 230955-79-0 230955-80-3 230955-81-4 230955-82-5
 250140-89-7

(polyester polyquaternary compds., compns. contg. them, and use thereof as fabric softeners)

L57 ANSWER 10 OF 38 HCA COPYRIGHT 2005 ACS on STN

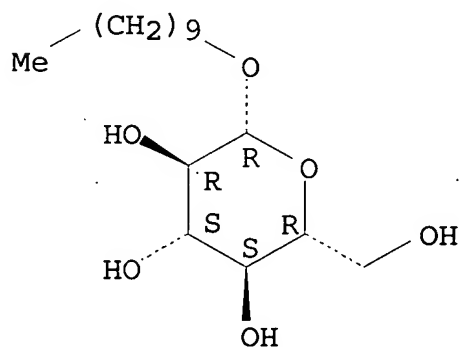
134:76109 Preparation of proliposome-encapsulated **esterquats**
 and usage in cosmetic products. Garces, Garces Josep; De Moragas,
 Maria (Primacare S.A., Spain). Eur. Pat. Appl. EP 1064933 A1
 20010103, 18 pp. DESIGNATED STATES: R: AT, BE, CH, DE, DK, ES, FR,
 GB, GR, IT, LI, LU, NL, SE, MC, PT, IE, SI, LT, LV, FI, RO.
 (German). CODEN: EPXXDW. APPLICATION: EP 1999-112671 19990702.

AB The invention concerns the encapsulation of **esterquats** in
 proliposomes for increased activity in hair prepns. by mixing the
esterquat in a cosmetically acceptable non-aq. solvent with

liposome-forming lecithins and/or phospholipids. The water-free proliposomes form real liposomes as soon as the prepn. is applied in aq. medium. **Esterquats** encapsulated in proliposomes are fatty acid **esters** of **quaternary** mono-, di-, and triethanolamines; the wt. ratio of **esterquats** to lecithins and/or phospholipids is 1:20 to 5:1. Solvents are ethanol, ethylene glycol, propylene glycol, butylene glycol, PEG (MW 100-1000), and glycerol. Thus 22 g of Dehyquart L80 (contg. dicocoylethylhydroxyethylammonium methosulfate and propylene glycol) was mixed at 65 .degree.C with 44 soy lecithin powder and 33 g addnl. propylene glycol until a clear soln. was obtained. The product was used in hair conditioning preps.

IT 58846-77-8, Plantacare 818
 (prepn. of proliposome-encapsulated **esterquats** and
 usage in cosmetic products)
 RN 58846-77-8 HCA
 CN .beta.-D-Glucopyranoside, decyl (9CI) (CA INDEX NAME)

Absolute stereochemistry.



IC ICM A61K007-50
 ICS A61K007-00
 CC 62-1 (Essential Oils and Cosmetics)
 Section cross-reference(s): 63
 ST **esterquat** encapsulation proliposome liposome cosmetics
 hair prepn
 IT Alcohols, biological studies
 Alcohols, biological studies
 (C16-18, ethoxylated; prepn. of proliposome-encapsulated
esterquats and usage in cosmetic products)
 IT Alcohols, biological studies
 (C16-18; prepn. of proliposome-encapsulated **esterquats**
 and usage in cosmetic products)
 IT Enzymes, biological studies
 (MSG #8.; prepn. of proliposome-encapsulated **esterquats**
 and usage in cosmetic products)

- IT Alcohols, biological studies
(coco, ethoxylated; prepn. of proliposome-encapsulated **esterquats** and usage in cosmetic products)
- IT Hair preparations
(conditioners; prepn. of proliposome-encapsulated **esterquats** and usage in cosmetic products)
- IT Quaternary ammonium compounds, biological studies
(**esterquats**; prepn. of proliposome-encapsulated **esterquats** and usage in cosmetic products)
- IT Fatty acids, biological studies
(esters, **esterquats**; prepn. of proliposome-encapsulated **esterquats** and usage in cosmetic products)
- IT Monoglycerides
(ethoxylated coco; prepn. of proliposome-encapsulated **esterquats** and usage in cosmetic products)
- IT Keratins
(hydrolyzates; prepn. of proliposome-encapsulated **esterquats** and usage in cosmetic products)
- IT Drug delivery systems
(liposomes, pro-; prepn. of proliposome-encapsulated **esterquats** and usage in cosmetic products)
- IT Drug delivery systems
(microcapsules; prepn. of proliposome-encapsulated **esterquats** and usage in cosmetic products)
- IT Drug delivery systems
(ointments, creams; prepn. of proliposome-encapsulated **esterquats** and usage in cosmetic products)
- IT Cosmetics
 - Drugs
 - Encapsulation
 - Hair preparations
 - Insecticides
 - Microcapsules
 - Shampoos
(prepn. of proliposome-encapsulated **esterquats** and usage in cosmetic products)
- IT Protein hydrolyzates
- Soaps
(prepn. of proliposome-encapsulated **esterquats** and usage in cosmetic products)
- IT Lecithins
Phospholipids, biological studies
(prepn. of proliposome-encapsulated **esterquats** and usage in cosmetic products)
- IT Liposomes
(pro-; prepn. of proliposome-encapsulated **esterquats** and usage in cosmetic products)
- IT Sterols

(soya; prepn. of proliposome-encapsulated **esterquats** and usage in cosmetic products)

IT 56-81-5, Glycerol, biological studies 58-95-7, Copherol 1250
81-13-0, Panthenol 3687-46-5, Cetirol V 5333-42-6, Eutanol G
7647-14-5, Sodium chloride, biological studies 9004-82-4, Texapon
NSO 9051-97-2, Highcareen GS 11099-07-3, Glyceryl stearate
27215-38-9, Monomuls 901 12 27731-62-0, Sodium myreth sulfate
31566-31-1, Cutina GMS 58450-52-5, Texapon SB3 **58846-77-8**
, Plantacare 818 66082-42-6, Lameform TGI 84563-77-9, Hydagen
CMF 155808-76-7, Euperlan PK 3000 164715-16-6, Lamesoft 156
179529-83-0, Lamesoft LMG 183291-15-8, Dehyton PK45 186322-48-5,
Cetirol PGL 195889-53-3, Eumulgin vl 75 213190-84-2, Plantacare
2000 288150-38-9, Plantacare PS 10

(prepn. of proliposome-encapsulated **esterquats** and usage in cosmetic products)

IT 225659-54-1, Dehyquart L80
(proliposome-encapsulated; prepn. of proliposome-encapsulated **esterquats** and usage in cosmetic products)

L57 ANSWER 11 OF 38 HCA COPYRIGHT 2005 ACS on STN

134:46653 Aqueous pearlescent concentrates containing disubstituted urea and emulsifiers and polyols for cosmetics. Schmid, Karl Heinz; Eggers, Anke; Herault, David; Westfechtel, Alfred; Nieendick, Claus (Cognis Deutschland G.m.b.H., Germany). Eur. Pat. Appl. EP 1060737 A1 20001220, 15 pp. DESIGNATED STATES: R: AT, BE, CH, DE, DK, ES, FR, GB, GR, IT, LI, LU, NL, SE, MC, PT, IE, SI, LT, LV, FI, RO. (German). CODEN: EPXXDW. APPLICATION: EP 2000-112101 20000606. PRIORITY: DE 1999-19927173 19990615.

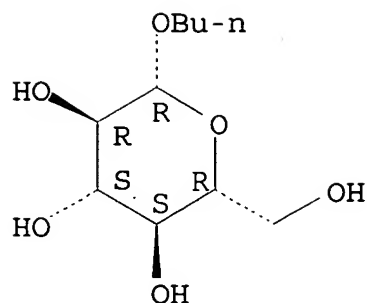
AB Aq. pearlescent concs. contain 1-99% disubstituted urea, 0.1-99% anionic, nonionic, cationic, and/or zwitterionic surfactants and 0-40% polyols. Thus, a formulation contained trimethylolpropane distearyl ether 25, ethoxylated coco fatty alc. 5, cocoalkyl glycoside 9, coco fatty acid **betaine** 5, glycerin 5 and water to 100%.

IT **5391-18-4D**, Butyl glucoside, esters **27836-64-2D**, Lauryl glucoside, esters
(aq. pearlescent concs. contg. disubstituted urea and emulsifiers and polyols for cosmetics)

RN 5391-18-4 HCA

CN .beta.-D-Glucopyranoside, butyl (9CI) (CA INDEX NAME)

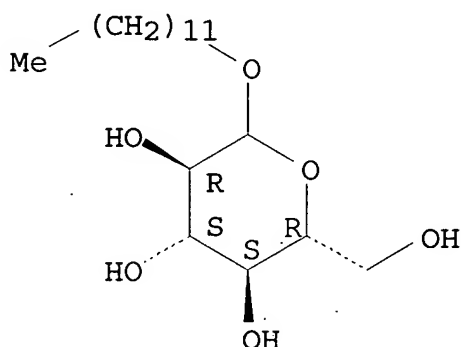
Absolute stereochemistry. Rotation (-).



RN 27836-64-2 HCA

CN D-Glucopyranoside, dodecyl (9CI) (CA INDEX NAME)

Absolute stereochemistry.



IC ICM A61K007-48

ICS A61K007-06

CC 62-4 (Essential Oils and Cosmetics)

IT 50-70-4D, Sorbitol, esters 56-81-5, Glycerin, biological studies
 57-55-6, 1,2-Propylene glycol, biological studies 77-99-6D,
 Trimethylolpropane, esters 110-63-4, Butylene glycol, biological
 studies 115-77-5D, Pentaerythritol, esters 629-11-8,
 1,6-Hexanediol 931-40-8 3149-68-6D, Methyl glucoside, esters
 3542-20-9 **5391-18-4D**, Butyl glucoside, esters
 9004-34-6D, Cellulose, esters, biological studies 25322-68-3D,
 Polyethylene glycol, esters 25618-55-7D, Polyglycerin, esters
27836-64-2D, Lauryl glucoside, esters
 (aq. pearlescent concs. contg. disubstituted urea and emulsifiers
 and polyols for cosmetics)

L57 ANSWER 12 OF 38 HCA COPYRIGHT 2005 ACS on STN

134:9162 Liquid detergent mixture for use in shampoos and body-cleansing
 preparations. (Goldwell G.m.b.H., Germany). Ger.
 Gebrauchsmusterschrift DE 29910159 U1 20001123, 17 pp. (German).

CODEN: GGXXFR. APPLICATION: DE 1999-29910159 19990610.

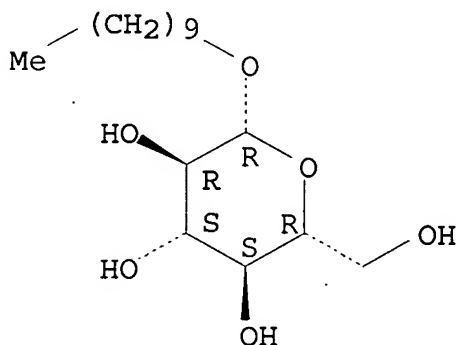
AB A hair-cleansing compn. is disclosed which contains (a) 5-40% by wt. anionic surfactant of the sulfate, sulfonate, carboxylate, and/or alkylphosphate type (except for C8-22 acylaminocarboxylic acids and their water-sol. salts), (b) 0.5-10% by wt. C8-22 acylaminocarboxylic acids or their water-sol. salts, and (c) 0.25-10% by wt. of a glycerol mono-C10-18-fatty acid ester. Thus, a shampoo for dry and damaged hair comprises (wt. %) sodium lauroyl ether sulfate 8.0, sodium lauroyl sarcosinate 2.0, C12-14-alkylglucoside (P.E. .apprxeq. 1.4) 1.0, lauroyl hydroxysultain 1.0, cationic conditioner (**Esterquat**; Tetranyl CO 40) 0.8, perfume 0.6, glyceryl laurate 0.8, sodium benzoate 0.6, benzophenone-3 0.1, citric acid to pH 6.0, and water q.s. to 100%.

IT **58846-77-8**, Decylglucoside
(liq. detergent mixt. for use in shampoos and body-cleansing preps.)

RN 58846-77-8 HCA

CN .beta.-D-Glucopyranoside, decyl (9CI) (CA INDEX NAME)

Absolute stereochemistry.



IC ICM A61K007-50

ICS A61K007-08

CC 62-4 (Essential Oils and Cosmetics)
Section cross-reference(s): 46

IT 36574-66-0D, N-coco acyl derivs.
(Cocoamidopropyl **betaine**; liq. detergent mixt. for use in shampoos and body-cleansing preps.)

IT 56-81-5D, Glycerol, cocoyl derivs. 77-92-9, Citric acid, biological studies 131-57-7, Benzophenone-3 137-16-6; Sodium lauroyl sarcosinate 532-32-1, Sodium benzoate 3397-65-7 7757-81-5, Sodium sorbate 13197-76-7, Lauryl hydroxysultaine 17404-70-5 25322-68-3D, Polyethylene glycol, hydrogenated castor oil deriv. 26468-80-4 26590-05-6, Polyquaternium-7 29923-31-7 37318-95-9, Glyceryl laurate **58846-77-8**, Decylglucoside

95144-24-4, Polyquaternium-16 97338-06-2, Tetranyl CO 40
103710-04-9

(liq. detergent mixt. for use in shampoos and body-cleansing
prepns.)

L57 ANSWER 13 OF 38 HCA COPYRIGHT 2005 ACS on STN

133:168165 Detergent mixtures containing **esterquats** and aloe
for cleansing hair and delicate textiles. Weuthen, Manfred; Fabry,
Bernd; Blasquez, Jose Fernandez; Pi Subirana, Rafael (Cognis
Deutschland G.m.b.H., Germany). PCT Int. Appl. WO 2000045788 A1
20000810, 38 pp. DESIGNATED STATES: W: US; RW: AT, BE, CH, CY, DE,
DK, ES, FI, FR, GB, GR, IE, IT, LU, MC, NL, PT, SE. (German).
CODEN: PIXXD2. APPLICATION: WO 2000-EP531 20000125. PRIORITY: DE
1999-19904513 19990204.

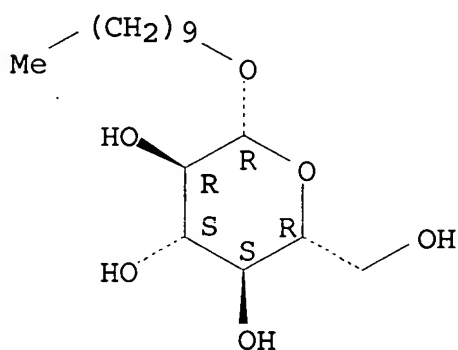
AB Disclosed are novel detergent mixts. contg. (a) **ester
quaternaries** and (b) aloe. The prepns. are extremely mild
with respect to the skin. They are characterized by excellent
cleaning properties and provide synthetic and natural fibers with
excellent softness, reduce electrostatic charges and promote
re-wettability. The compns. are suitable for cleaning hair and skin
and for cleaning of delicate textiles.

IT **58846-77-8**, Plantacare 818
(detergent mixts. contg. **esterquats** and aloe for
cleansing hair and delicate textiles)

RN 58846-77-8 HCA

CN .beta.-D-Glucopyranoside, decyl (9CI) (CA INDEX NAME)

Absolute stereochemistry.



IC ICM A61K007-50

ICS A61K007-48; A61K007-06; C11D001-62; C11D003-382

CC 62-3 (Essential Oils and Cosmetics)

Section cross-reference(s): 46

ST detergent **esterquat** aloe hair textile

IT Alcohols, biological studies

(C16-18, ethoxylated, eumulgin B1 and B2; detergent mixts. contg.

- esterquats** and aloe for cleansing hair and delicate textiles)
- IT Alcohols, biological studies
(C16-18; detergent mixts. contg. **esterquats** and aloe for cleansing hair and delicate textiles)
- IT Glycerides, biological studies
(C8-10; detergent mixts. contg. **esterquats** and aloe for cleansing hair and delicate textiles)
- IT Brightening
(agents; detergent mixts. contg. **esterquats** and aloe for cleansing hair and delicate textiles)
- IT Cosmetics
(cleansing; detergent mixts. contg. **esterquats** and aloe for cleansing hair and delicate textiles)
- IT Alcohols, biological studies
(coco, ethoxylated; detergent mixts. contg. **esterquats** and aloe for cleansing hair and delicate textiles)
- IT Glycosides
(coco; detergent mixts. contg. **esterquats** and aloe for cleansing hair and delicate textiles)
- IT Aloe barbadensis
Aloe ferox
Beeswax
Detergents
Hair preparations
Shampoos
Surfactants
Textiles
(detergent mixts. contg. **esterquats** and aloe for cleansing hair and delicate textiles)
- IT Protein hydrolyzates
(detergent mixts. contg. **esterquats** and aloe for cleansing hair and delicate textiles)
- IT Quaternary ammonium compounds, biological studies
(ester group-contg.; detergent mixts. contg. **esterquats** and aloe for cleansing hair and delicate textiles)
- IT Monoglycerides
(ethoxylated coco; detergent mixts. contg. **esterquats** and aloe for cleansing hair and delicate textiles)
- IT Castor oil
(hydrogenated, ethoxylated; detergent mixts. contg. **esterquats** and aloe for cleansing hair and delicate textiles)
- IT Keratins
(hydrolyzates; detergent mixts. contg. **esterquats** and aloe for cleansing hair and delicate textiles)
- IT Sterols
(soya, ethoxylated; detergent mixts. contg. **esterquats**

- and aloe for cleansing hair and delicate textiles)
- IT 36574-66-0D, N-coco acyl derivs.
(cocoamidopropyl **betaine**, glucosides; detergent mixts.
contg. **esterquats** and aloe for cleansing hair and
delicate textiles)
- IT 56-81-5, Glycerol, biological studies 81-13-0, Panthenol
107-64-2, Distearyl dimethyl ammonium chloride 131-57-7, Neo
Heliopan BB 515-69-5, Bisabolol 629-82-3, Cetiol OE 1314-13-2,
Zinc oxide, biological studies 3687-46-5, Cetiol V 5333-42-6,
Eutanol G 5466-77-3, Neo Heliopan AV 6197-30-4, Neo Heliopan 303
7647-14-5, Sodium chloride, biological studies 9004-82-4, Texapon
NSO 10034-99-8, Magnesium sulfate heptahydrate 13463-67-7,
Titanium dioxide, biological studies 17673-56-2, Cetiol J600
27215-38-9, Monomuls 90L12 27503-81-7, Neo Heliopan Hydro
31566-31-1, Cutina GMS 32208-04-1, Dehyquart F 75 32208-04-1,
Dehyquart au 46 32440-50-9, Antaron V 216 58450-52-5, Texapon SB
3 **58846-77-8**, Plantacare 818 66082-42-6, Lameform TGI
68936-95-8, Tegocare PS 71617-10-2, Neo Heliopan E1000
74565-11-0, Finsolv TN 88122-99-0, Uvinul T 150 137802-13-2,
Cetiol SN 144747-22-8, Dehymuls PGPH 158191-47-0, Texapon K 14S
164715-16-6, Lamesoft 156 178463-40-6, Plantaren 818
178966-46-6, Euperlan PK 3000AM 179529-83-0, Lamesoft LMG
183291-15-8, Dehyton PK 45 186322-48-5, Cetiol PGL 188012-81-9,
Emulgade SE 188763-17-9, Copherol F1300 195889-53-3, Eumulgin VL
75 213190-84-2, Plantacare 2000 213328-96-2, Dehyquart D 6003
215934-26-2, Emulgade PL 68/50 225659-54-1, Dehyquart L 80
267893-39-0, Dehyquart F 100 288150-32-3, Dehyquart C 4043
288150-38-9, Plantacare PS 10
(detergent mixts. contg. **esterquats** and aloe for
cleansing hair and delicate textiles)

L57 ANSWER 14 OF 38 HCA COPYRIGHT 2005 ACS on STN

131:117751 Quaternary ammonium compounds based on
methylethanolisopropanolamine, compositions, and uses. Friedli,
Floyd; Kohle, Hans-Jurgen (Witco Corporation, USA; Witco Surfactants
G.m.b.H.). PCT Int. Appl. WO 9935120 A1 19990715, 68 pp.
DESIGNATED STATES: W: AU, BR, CA, CN, CZ, HR, HU, ID, IL, JP, KR,
MX, NO, NZ, PL, RO, RU, SG, SK, US, YU; RW: AT, BE, CH, CY, DE, DK,
ES, FI, FR, GB, GR, IE, IT, LU, MC, NL, PT, SE. (English). CODEN:
PIXXD2. APPLICATION: WO 1999-US213 19990106. PRIORITY: US
1998-71054 19980109.

AB A quaternary ammonium compd. $R_1O(CH_2)_2N^+Me(R)CH_2CH(Me)Z^-A^-$, I, where
R = H, Me or Et; R_1, R_2 = fatty acid radicals having 6-22 C atoms; Z^-
= OH, OR₂; and A^- = inorg. or org. anion selected from fluoride,
chloride, bromide, iodide, chlorite, chlorate, hydroxide,
hypophosphite, phosphite, phosphate, carbonate, formate, acetate,
lactate, and other carboxylates, oxalate, methylsulfate, Et sulfate,
benzoate, and salicylate. A fabric softener contained I (R = Me; A

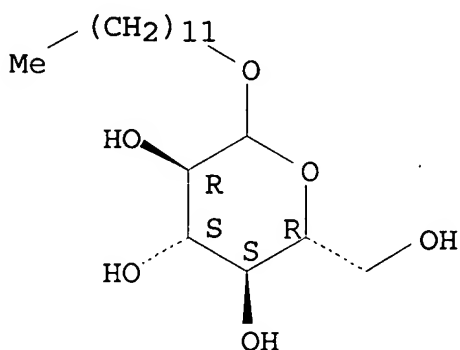
= MeSO₄⁻; Z = OR₂; R₁, R₂ = C₁₆-18 fatty acid deriv.) 20.8, dye soln. 0.60, antifoam 0.20, fragrance 0.80, CaCl₂ 0.1%, and the balance water.

IT 27836-64-2, Lauryl glucoside 58846-77-8, Decyl glucoside
(personal care agent contg. methylethanolisopropanolamine ester quat and deterative)

RN 27836-64-2 HCA

CN D-Glucopyranoside, dodecyl (9CI) (CA INDEX NAME)

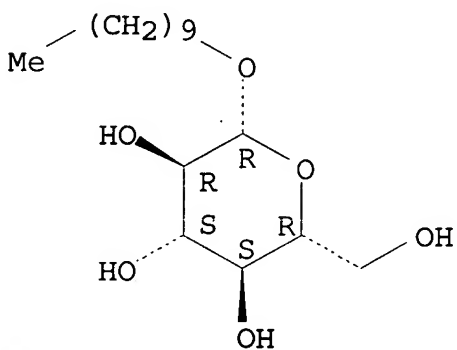
Absolute stereochemistry.



RN 58846-77-8 HCA

CN .beta.-D-Glucopyranoside, decyl (9CI) (CA INDEX NAME)

Absolute stereochemistry.



IC ICM C07C219-06

ICS C07C219-08; C11D001-62; A61K007-50

CC 46-5 (Surface Active Agents and Detergents)

Section cross-reference(s): 23, 51

ST quaternary ammonium compd hair rinse; methylethanolisopropanolamine
quaternary ammonium ester; softener fabric
quaternary ammonium compd

- IT **Betaines**
(Cocamidopropyl; quaternary ammonium compds. based on methylethanolisopropanolamine, compns., and uses)
- IT Surfactants
(amphoteric; personal care agent contg. methylethanolisopropanolamine **ester quat** and deterative)
- IT Surfactants
(anionic; personal care agent contg. methylethanolisopropanolamine **ester quat** and deterative)
- IT Surfactants
(cationic; personal care agent contg. methylethanolisopropanolamine **ester quat** and deterative)
- IT **Betaines**
(coco alkyl dimethyl; quaternary ammonium compds. based on methylethanolisopropanolamine, compns., and uses)
- IT Amides, uses
(coco, N-[3-(dimethylamino)propyl], N-oxides, Rewominox B 204; personal care agent contg. methylethanolisopropanolamine **ester quat** and deterative)
- IT Surfactants
(ionic; personal care agent contg. methylethanolisopropanolamine **ester quat** and deterative)
- IT Quaternary ammonium compounds, uses
(methylethanolisopropanolamine C16-18-alkyl **esters**; methylethanolisopropanolamine **ester quat**, compns., and uses)
- IT Fabric softeners
(methylethanolisopropanolamine **ester quat**, compns., and uses)
- IT Surfactants
(nonionic; personal care agent contg. methylethanolisopropanolamine **ester quat** and deterative)
- IT Surfactants
(zwitterionic; personal care agent contg. methylethanolisopropanolamine **ester quat** and deterative)
- IT 14350-97-1, Disodium lauroamphodiacetate
(disodium lauroamphodiacetate; personal care agent contg. methylethanolisopropanolamine **ester quat** and deterative)
- IT 142-58-5, Myristamide MEA
(myristamide MEA; personal care agent contg. methylethanolisopropanolamine **ester quat** and deterative)

IT 93-82-3, Stearamide DEA 93-83-4, Oleamide DEA 106-16-1
 111-05-7 111-57-9, Stearamide MEA 111-58-0, Oleamide MEA
 120-40-1, Lauramide DEA 139-96-8, TEA lauryl sulfate 142-26-7,
 Acetamide MEA 142-54-1 142-78-9, Lauramide MEA 151-21-3,
 Sodium lauryl sulfate, uses 544-31-0 683-10-3,
Laurylbetaine 820-66-6 1191-50-0, Sodium myristyl
 sulfate 1300-72-7, Sodium xylene sulfonate 1643-20-5, Lauramine
 oxide 2235-54-3, Ammonium lauryl sulfate 2530-44-1 2601-33-4
 2605-79-0 3332-27-2, Myristamine oxide 4292-10-8,
 Lauramidopropyl **betaine** 5422-34-4 6179-44-8
 7128-91-8 7545-23-5, Myristamide DEA 7545-24-6 9004-82-4,
 Sodium laureth sulfate 9016-45-9, Nonylphenol ethoxylate
 10525-14-1 14351-50-9 20545-92-0, Undecylenamide MEA
 25066-20-0 25159-40-4 26447-10-9, Ammonium xylene sulfonate
 26483-35-2 26837-33-2 26920-62-7, **Behenylbetaine**
 27233-34-7 27323-41-7 27731-62-0, Sodium myristeth sulfate
27836-64-2, Lauryl glucoside 32612-48-9, Ammonium laureth
 sulfate 35627-96-4 38000-82-7 40716-42-5 52794-79-3,
 Isostearamide DEA 54536-43-5, Isostearamide MEA 56863-02-6
 58450-52-5, Disodium laureth sulfosuccinate **58846-77-8**,
 Decyl glucoside 59272-84-3 61792-31-2 63451-24-1 63663-10-5
 63663-12-7 63793-60-2, Witconol APM 64012-03-9 64058-34-0
 66654-02-2 67799-05-7 67806-10-4 67806-12-6 68171-52-8
 68929-04-4 69868-14-0 70206-24-5, Rewoquat W 3690 70496-39-8
 71850-81-2 79120-44-8 94109-05-4 138527-93-2 149879-98-1
 152848-22-1 154441-65-3, Stearamine oxide 164118-71-2
 230955-77-8 230955-78-9 230955-79-0 230955-80-3 230955-81-4
 230955-82-5
 (personal care agent contg. methylethanolisopropanolamine
ester quat and deterative)

L57 ANSWER 15 OF 38 HCA COPYRIGHT 2005 ACS on STN

129:262032 Detergents for cleaning textiles, hair, and human skin.
 Weber, Peter; Fabry, Bernd (Henkel K.-G.a.A., Germany). Ger. DE
 19730649 C1 19980924, 10 pp. (German). CODEN: GWXXAW.
 APPLICATION: DE 1997-19730649 19970717.

AB Detergents for the title use and exhibiting good antistatic
 properties on textiles contain **esterquats**, chitosan
 (derivs.), protein hydrolyzates, and optionally, alkyl and(or)
alkenyloligoglycosides and(or) **betaines**.

IC ICM C11D001-94

ICS A61K007-075; A61K007-50; A61K007-42

CC 46-5 (Surface Active Agents and Detergents)

Section cross-reference(s): 62

ST laundry detergent **esterquat** chitosan protein hydrolyzate;
 skin cleaning detergent **esterquat** chitosan;
oligoglycoside betaine shampoo

IT **Betaines**

(cocamidopropyl; detergents for cleaning textiles, hair, and human skin)

L57 ANSWER 16 OF 38 HCA COPYRIGHT 2005 ACS on STN

128:323177 High-density granular detergent compositions containing **aminopolycarboxylic acid** or salt with good cold water solubility and detergency. Takata, Shuji; Hagino, Genjiro (Kao Corp., Japan). Jpn. Kokai Tokkyo Koho JP 10102092 A2 19980421 Heisei, 16 pp. (Japanese). CODEN: JKXXAF. APPLICATION: JP 1996-261748 19961002.

AB Title compns. with bulk d. 0.6-1.2 g/mL, comprise (a) **aminopolycarboxylic acid** N[CH(R1)CO2M][CH(R2)CO2M][CH(R3)CO2M] (I; R1, R2 = H, Me; R3 = CH2CO2M, CH(OH)CO2M, CH2CH2CO2M, CH2OH; M = H, Na, K, NH4) 0.1-30, (b) surfactants 10-50, and (c) cryst. aluminosilicates 5-30%. Thus, a soln. contg. I (R1 = Me; R2 = H, R3 = CH2OH; M = Na) 10, Na dodecylbenzenesulfonate 20, Na dodecylsulfate 5, Na palmitate 2, polyoxyethylene dodecyl ether 5, zeolite 20, acrylic acid-maleic acid copolymer Na salt 3, polyethylene glycol 1, NaCO3 10, Na silicate 5, and other additives 19% showed detergency 65.4% and good cold water (5.degree.) soly.

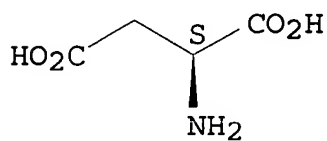
IT 56-84-8, L-Aspartic acid, reactions 79-11-8, Monochloroacetic acid, reactions 302-72-7, Alanine 302-84-1, Serine 617-65-2, Glutamic acid 71653-06-0

(for prepn. of **aminopolycarboxylic acids**; high-d. granular laundry detergent compns. contg. **aminopolycarboxylic acids** as builders)

RN 56-84-8 HCA

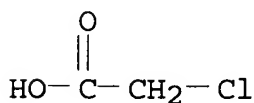
CN L-Aspartic acid (9CI) (CA INDEX NAME)

Absolute stereochemistry. Rotation (+).



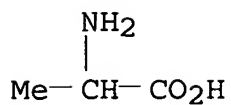
RN 79-11-8 HCA

CN Acetic acid, chloro- (8CI, 9CI) (CA INDEX NAME)

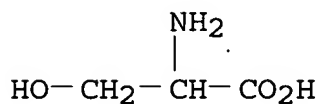


RN 302-72-7 HCA

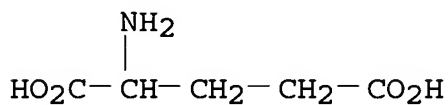
CN Alanine (9CI) (CA INDEX NAME)



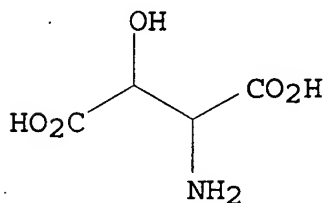
RN 302-84-1 HCA
CN Serine (9CI) (CA INDEX NAME)



RN 617-65-2 HCA
CN Glutamic acid (9CI) (CA INDEX NAME)



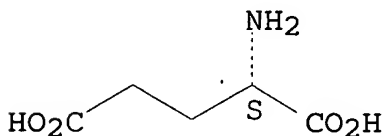
RN 71653-06-0 HCA
CN Aspartic acid, 3-hydroxy- (9CI) (CA INDEX NAME)



IT 56-86-0, L-Glutamic acid, reactions
(high-d. granular laundry detergent compns. contg.
aminopolycarboxylic acids as builders)

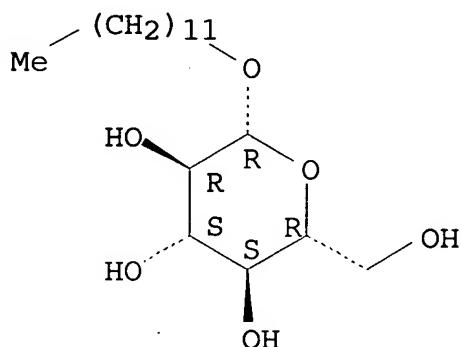
RN 56-86-0 HCA
CN L-Glutamic acid (9CI) (CA INDEX NAME)

Absolute stereochemistry.



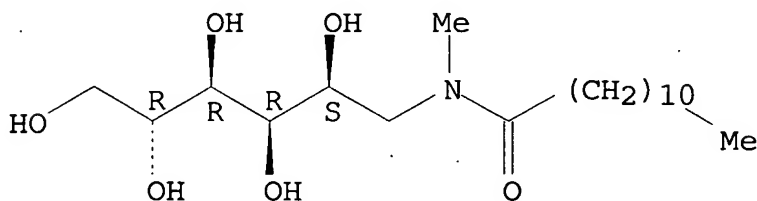
IT 59122-55-3 87246-72-8, N-Dodecanoyl-N-methylglucamine
 (surfactant; high-d. granular laundry detergent compns. contg. aminopolycarboxylic acids as builders)
 RN 59122-55-3 HCA
 CN .beta.-D-Glucopyranoside, dodecyl (9CI) (CA INDEX NAME)

Absolute stereochemistry.



RN 87246-72-8 HCA
 CN D-Glucitol, 1-deoxy-1-[methyl(1-oxododecyl)amino]- (9CI) (CA INDEX NAME)

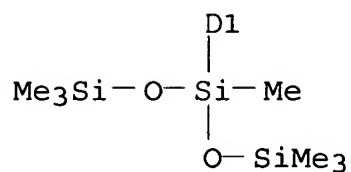
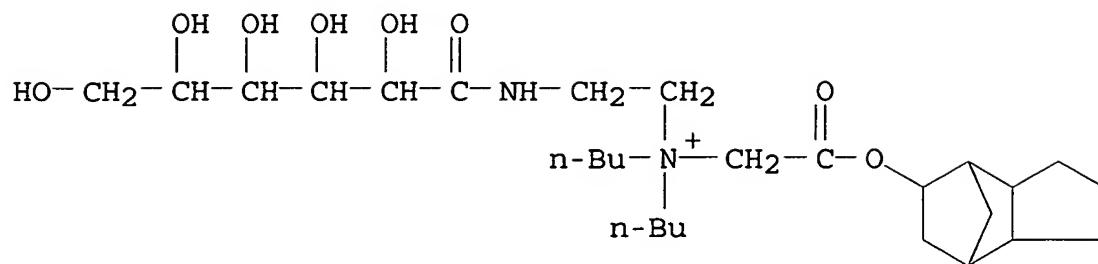
Absolute stereochemistry.



IC ICM C11D003-33
 ICS C11D003-08; C11D017-00
 CC 46-5 (Surface Active Agents and Detergents)
 ST aminopolycarboxylic acid granular laundry detergent;
 granular detergent density soly detergency; aluminosilicate granular
 laundry detergent
 IT Polyoxyalkylenes, uses
 (alkyl group-terminated, surfactants; high-d. granular laundry
 detergent compns. contg. aminopolycarboxylic aids as
 builders)
 IT Sulfonic acids, uses
 (derivs., surfactants; high-d. granular laundry detergent compns.
 contg. aminopolycarboxylic aids as builders)

- IT Detergent builders
(high-d. granular laundry detergent compns. contg.
aminopolycarboxylic aids as builders)
- IT Zeolites (synthetic), uses
(high-d. granular laundry detergent compns. contg.
aminopolycarboxylic aids as builders)
- IT Detergents
(laundry, granular; high-d. granular laundry detergent compns.
contg. **aminopolycarboxylic** aids as builders)
- IT Polyoxyalkylenes, uses
(mono(fatty acyl)-terminated, surfactants; high-d. granular
laundry detergent compns. contg. **aminopolycarboxylic**
aids as builders)
- IT **Amino** acids, uses
(polycarboxylic, builders; high-d. granular laundry detergent
compns. contg. **aminopolycarboxylic** aids as builders)
- IT Fatty acids, uses
(sulfo, Me esters, sodium salts, surfactants; high-d. granular
laundry detergent compns. contg. **aminopolycarboxylic**
aids as builders)
- IT Fatty acids, uses
(sulfo, esters, salts, surfactants; high-d. granular laundry
detergent compns. contg. **aminopolycarboxylic** aids as
builders)
- IT Fatty acids, uses
(sulfo, salts, surfactants; high-d. granular laundry detergent
compns. contg. **aminopolycarboxylic** aids as builders)
- IT 205532-57-6P 205532-58-7P 205532-59-8P 207127-32-0P
207127-33-1P 207127-34-2P 207127-35-3P 207127-36-4P
(builder; high-d. granular laundry detergent compns. contg.
aminopolycarboxylic aids as builders)
- IT 207127-39-7P
(for prepn. of **aminopolycarboxylic** acids; high-d.
granular laundry detergent compns. contg.
aminopolycarboxylic acids as builders)
- IT 56-84-8, L-Aspartic acid, reactions 75-07-0, Acetaldehyde,
reactions 79-11-8, Monochloroacetic acid, reactions
110-16-7, 2-Butenedioic acid (Z)-, reactions 302-72-7,
Alanine 302-84-1, Serine 617-65-2, Glutamic acid
66065-46-1, Monosodium epoxysuccinate 71653-06-0
(for prepn. of **aminopolycarboxylic** acids; high-d.
granular laundry detergent compns. contg.
aminopolycarboxylic acids as builders)
- IT 56-86-0, L-Glutamic acid, reactions
(high-d. granular laundry detergent compns. contg.
aminopolycarboxylic acids as builders)
- IT 106392-12-5, Polyoxyethylene-polyoxypropylene block copolymer
(high-d. granular laundry detergent compns. contg.)

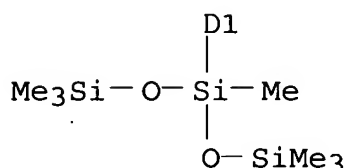
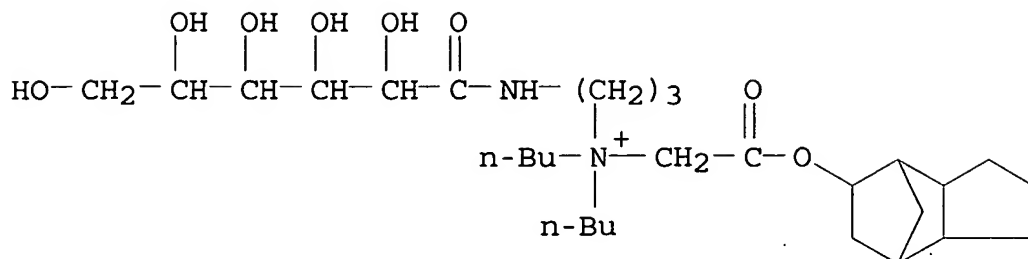
- aminopolycarboxylic acids as builders)
- IT 150624-42-3P 207127-37-5P
(intermediate, for prepn. of aminopolycarboxylic acids;
high-d. granular laundry detergent compns. contg.
aminopolycarboxylic acids as builders)
- IT 207127-38-6P
(intermediate, for prepn. of aminopolycarboxylic acids;
high-d. granular laundry detergent compns. contg.
aminopolycarboxylic acids as builders)
- IT 98-11-3D, Benzenesulfonic acid, linear alkyl derivs., sodium salts,
uses 151-21-3, Sodium dodecyl sulfate, uses 408-35-5, Sodium
palmitate 9002-92-0, Polyoxyethylene dodecyl ether
59122-55-3 87246-72-8, N-Dodecanoyl-N-
methylglucamine
(surfactant; high-d. granular laundry detergent compns. contg.
aminopolycarboxylic acids as builders)
- L57 ANSWER 17 OF 38 HCA COPYRIGHT 2005 ACS on STN
- 127:163457 Silicon-modified carbohydrate surfactants.III. Cationic and
anionic compounds. Wagner, R.; Richter, L.; Weiland, B.;
Weissmueller, J.; Reiners, J.; Kraemer, W. (Max-Planck-Institute for
Colloids and Surfaces, Berlin, 12489, Germany). Applied
Organometallic Chemistry, 11(6), 523-538 (English) 1997. CODEN:
AOCHEX. ISSN: 0268-2605. Publisher: Wiley.
- AB Ionic siloxanyl-modified carbohydrate surfactants were synthesized
by alkylation/esterification of precursors contg. tertiary amino
functions. Depending on the reaction strategy, the siloxanyl moiety
is part of the alkylating agent or the substrate. Polyhydroxylated
tertiary amines can be quaternized by siloxanyl-modified
chloroacetic acid esters or epoxysiloxanes in the presence of
glacial acetic acid. The esterification of tertiary amines bearing
carbohydrate and siloxanyl subunits by cyclic acid anhydrides
yields, after neutralization, carboxylate salts. The reaction of
hydroxyl groups and sulfamic acid leads to sulfates. The new
substances were characterized by ¹³C NMR spectroscopy, gas
chromatog., elemental anal. and their soly. profile. These cationic
and anionic surfactants have potential as fabric softeners, wetting
agents, paint additives, and adjuvants in cosmetic and agrochem.
formulations.
- IT 164267-98-5P 164267-99-6P
(prepn. and soly. and quaternization potential of
siloxane-modified carbohydrate cationic and anionic surfactants)
- RN 164267-98-5 HCA
- CN 1-Butanaminium, N-butyl-N-[2-(D-gluconoylamino)ethyl]-N-[2-
[[octahydro[1,3,3,3-tetramethyl-1-[(trimethylsilyl)oxy]disiloxanyl]-
4,7-methano-1H-inden-5-yl]oxy]-2-oxoethyl]-, chloride (9CI) (CA
INDEX NAME)



● Cl⁻

RN 164267-99-6 HCA

CN 1-Butanaminium, N-butyl-N-[3-(D-gluconoylamino)propyl]-N-[2-[[octahydro[1,3,3,3-tetramethyl-1-[(trimethylsilyl)oxy]disiloxanyl]-4,7-methano-1H-inden-5-yl]oxy]-2-oxoethyl]-, chloride (9CI) (CA INDEX NAME)



● Cl⁻

CC 46-3 (Surface Active Agents and Detergents)

Section cross-reference(s): 33

IT 164113-50-2P 164113-52-4P 164267-95-2P 164267-96-3P
164267-97-4P **164267-98-5P 164267-99-6P**
164300-80-5P 193466-05-6P 193466-08-9P 193466-11-4P
193564-69-1P

(prepn. and soly. and quaternization potential of
siloxane-modified carbohydrate cationic and anionic surfactants)

L57 ANSWER 18 OF 38 HCA COPYRIGHT 2005 ACS on STN

124:320239 Nontoxic biodegradable liquid softener composition and quaternary ammonium salt and manufacture thereof. Sakata, Yuushi; Inokoshi, Junichi; Tachizawa, Osamu; Katoh, Tohru; Nishimoto, Uichirou; Ohtawa, Yasuki; Sakaguchi, Akira; Sotoya, Kohshiroh; Yamaguchi, Noriko (Japan). PCT Int. Appl. WO 9603370 A1 19960208, 167 pp. DESIGNATED STATES: W: US; RW: AT, BE, CH, DE, DK, ES, FR, GB, GR, IE, IT, LU, MC, NL, PT, SE. (Japanese). CODEN: PIXXD2. APPLICATION: WO 1995-JP1498 19950727. PRIORITY: JP 1994-175227 19940727; JP 1995-28196 19950216.

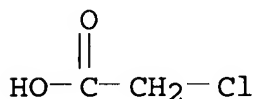
AB The softener compn. contains 3-40 wt.% of a quaternary ammonium salt R₂R₃R₄N⁺(CH₂)_nCO₂(YO)mR₁ X⁻ (R₁ = C₂₀₋₄₄ alkyl, alkenyl; R₂, R₃, R₄ = C₁₋₅ alkyl, hydroxyalkyl; Y = C₂₋₄ alkylene; m = 0-20; n = 1-6; X⁻ = anion). An aq. compn. contg. 25% Me₃N⁺CH₂CO₂CH₂CH[(CH₂)₁₅Me](CH₂)₁₇Me Cl⁻ and 3% isopropanol showed good storability at 5-50.degree. and imparted good softness, resiliency, and hydrophilicity to cotton

towel and acrylic jersey.

IT 79-11-8, reactions 108-01-0, Dimethylethanolamine
(nontoxic biodegradable liq. softener compn. and quaternary
ammonium salt and manuf. thereof)

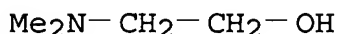
RN 79-11-8 HCA

CN Acetic acid, chloro- (8CI, 9CI) (CA INDEX NAME)



RN 108-01-0 HCA

CN Ethanol, 2-(dimethylamino)- (8CI, 9CI) (CA INDEX NAME)



IC ICM C07C229-12

ICS C07C229-30; D06M013-463; D06M013-224; D06M013-328

CC 46-6 (Surface Active Agents and Detergents)

IT 74-87-3, Methyl chloride, reactions 75-50-3, reactions 77-78-1,
Dimethyl sulfate 79-11-8, reactions 108-01-0,
Dimethylethanolamine 124-40-3, reactions 4224-62-8,
6-Chlorohexanoic acid 5333-42-6, 2-Octyldodecyl alcohol
176550-05-3 176550-12-2 176550-13-3 176550-16-6 176550-19-9
176550-20-2 176550-21-3

(nontoxic biodegradable liq. softener compn. and quaternary
ammonium salt and manuf. thereof)

IT 57-10-3, Palmitic acid, uses 57-11-4, Octadecanoic acid, uses
64-17-5, Ethanol, uses 67-63-0, Isopropanol, uses 112-57-2D,
Tetraethylenepentamine, alkoxylated 112-80-1, Oleic acid, uses
143-07-7, Dodecanoic acid, uses 9002-92-0, Polyethylene
glycol lauryl ether 9002-98-6D, Polyethylenimine,
alkoxylated 9003-11-6D, Ethylene oxide-propylene oxide copolymer,
polyamine adducts 9005-00-9, Polyethylene glycol stearyl
ether 9082-00-2, Ethylene oxide-propylene oxide copolymer glycerol
ether 17658-63-8, 2-Hexadecyl-1-eicosanol 31694-55-0
56449-05-9, Ethylene oxide-propylene oxide copolymer sorbitol ether
58670-89-6, 2-Decyl-1-tetradecanol 72388-18-2 176550-26-8
176550-27-9

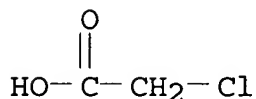
(nontoxic biodegradable liq. softener compn. and quaternary
ammonium salt and manuf. thereof)

L57 ANSWER 19 OF 38 HCA COPYRIGHT 2005 ACS on STN

124:11395 Preparation of aqueous **betaine** surfactant
concentrate with low viscosity. Behler, Ansgar; Fabry, Bernd;
Uphues, Guenter; Pi, Rafael; Bigorra Llosas, Joaquim; Ponsati

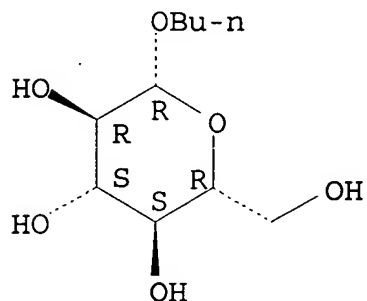
Obiols, Oriol (Henkel K.-G.a.A., Germany; Pulcra S. A.). Ger. Offen. DE 4408228 A1 19950914, 9 pp. (German). CODEN: GWXXBX. APPLICATION: DE 1994-4408228 19940311.

- AB An aq. liq. conc. contg. 50-60% **betaine** surfactant is prepd. by reacting a halo carboxylic acid or salt with an amido **amine** (optionally prepd. in situ from fatty acid and **amine**) in the presence of a viscosity regulator selected from nonionic surfactants with HLB value 6-12 and hydroxy carboxylic acids, polyols, and, optionally, fatty acids or their alkali salts. A conc. contg. 54.0% coco amidopropyl **betaine** was prepd. by reacting $\text{ClCH}_2\text{CO}_2\text{Na}$ with $\text{RCONH}(\text{CH}_2)_3\text{NMe}_2$ (RCO = coco acyl) in water contg. Cetiol HE (ethoxylated coco monoglyceride) and coco fatty acids.
- IT 79-11-8DP, quaternization products with amido **amines** (**betaines**; prepn. of aq. concs. contg. surface-active)
- RN 79-11-8 HCA
- CN Acetic acid, chloro- (8CI, 9CI) (CA INDEX NAME)



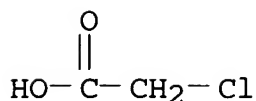
- IT 5391-18-4, Butyl glucoside
(for viscosity redn. in prepn. of aq. **betaine** surfactant concs.)
- RN 5391-18-4 HCA
- CN .beta.-D-Glucopyranoside, butyl (9CI) (CA INDEX NAME)

Absolute stereochemistry. Rotation (-).



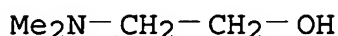
- IC ICM C11D001-90
- CC 46-3 (Surface Active Agents and Detergents)
- ST **betaine** surfactant prepn aq conc; coco amidopropyl **betaine** prepn aq conc; chloroacetate quaternization amido **amine** aq conc; viscosity control aq **betaine** conc; nonionic surfactant aq conc **betaine**; polyol viscosity

- control aq conc **betaine**; hydroxy carboxylic viscosity
control **betaine** conc
- IT Surfactants
(coco amidopropyl **betaines**; prepn. of aq. concs.
contg.)
- IT Quaternization
(of amido **amine** by chloroacetic acid in prepn. of aq.
surfactant conc.)
- IT **Betaines**
(coco amidopropyl, surfactants; prepn. of aq. concs. contg.)
- IT Carboxylic acids, uses
(hydroxy, for viscosity redn. in prepn. of aq. **betaine**
surfactant concs.)
- IT Alcohols, uses
(polyhydric, for viscosity redn. in prepn. of aq. **betaine**
surfactant concs.)
- IT 79-11-8DP, quaternization products with amido **amines**
109-55-7DP, amides with coco fatty acids, quaternization products
with chloroacetic acid 3926-62-3DP, Sodium chloroacetate,
quaternization products with amido **amines**
(**betaines**; prepn. of aq. concs. contg. surface-active)
- IT 50-21-5, uses 50-70-4, D-Glucitol, uses 56-81-5,
1,2,3-Propanetriol, uses 77-92-9, uses 79-14-1, uses 87-69-4,
uses 106-14-9, 12-Hydroxystearic acid 141-22-0, Ricinoleic acid
5391-18-4, Butyl glucoside 6915-15-7, Malic acid
(for viscosity redn. in prepn. of aq. **betaine**
surfactant concs.)
- L57 ANSWER 20 OF 38 HCA COPYRIGHT 2005 ACS on STN
- 123:59672 Biodegradable quaternary ammonium compounds as fabric
softeners. Weissen, Hans Joachim; Porta, Norbert (Akzo Nobel N.V.,
Neth.). Eur. Pat. Appl. EP 638639 A1 19950215, 20 pp. DESIGNATED
STATES: R: AT, BE, CH, DE, DK, ES, FR, GB, GR, IE, IT, LI, LU, MC,
NL, PT, SE. (English). CODEN: EPXXDW. APPLICATION: EP 1994-202175
19940725. PRIORITY: EP 1993-202352 19930810.
- AB The title compds. are prepd. by esterifying an aliph. polyol with
ClCH₂CO₂H and, optionally, a fatty acid and quaternizing the product
with a tertiary amine. A fabric-softening compn. with good
biodegradability was prepd. by esterifying 1 mol glycerol with 1 mol
hydrogenated tallow fatty acid and 1.5 mol ClCH₂CO₂H and
quaternizing the product with 1.5 mol Armeen DMHTD.
- IT 79-11-8DP, Chloroacetic acid, mixed esters with polyols and
fatty acids, quaternary ammonium derivs. 108-01-0DP,
Dimethylethanolamine, quaternization products with chloroacetate
esters of polyols
(fabric softeners; prepn. and properties of biodegradable)
- RN 79-11-8 HCA
- CN Acetic acid, chloro- (8CI, 9CI) (CA INDEX NAME)



RN 108-01-0 HCA

CN Ethanol, 2-(dimethylamino)- (8CI, 9CI) (CA INDEX NAME)



IC ICM C11D003-00

CC 46-5 (Surface Active Agents and Detergents)

IT 50-70-4DP, Sorbitol, esters with chloroacetic acid, quaternary ammonium derivs. 56-81-5DP, Glycerol, mixed esters with chloroacetic and fatty acids, quaternary ammonium derivs. 75-50-3DP, Trimethylamine, quaternization products with chloroacetate esters of polyols **79-11-8DP**, Chloroacetic acid, mixed esters with polyols and fatty acids, quaternary ammonium derivs. 107-21-1DP, Ethylene **glycol**, esters with chloroacetic acid, quaternary ammonium derivs. **108-01-0DP**, Dimethylethanolamine, quaternization products with chloroacetate esters of polyols 115-77-5DP, Pentaerythritol, mixed esters with chloroacetic and fatty acids, quaternary ammonium derivs. 6941-69-1DP, Ethylene **glycol** bischloroacetate, quaternary ammonium derivs.

(fabric softeners; prepn. and properties of biodegradable)

L57 ANSWER 21 OF 38 HCA COPYRIGHT 2005 ACS on STN

123:35823 Siloxanyl group-containing cationic polyhydroxy compounds for use as surfactants. Wagner, Roland; Wersig, Reingard; Schmaucks, Gerd; Weiland, Bernd; Richter, Lothar; Hennig, Annette; Jaenicke, Andrea; Reiners, Juergen; Kraemer, Wolfgang; et al. (Bayer A.-G., Germany). Ger. Offen. DE 4318537 A1 19941208, 31 pp. (German). CODEN: GWXXBX. APPLICATION: DE 1993-4318537 19930604.

AB The title compds. are prepd. for use as emulsifiers for insecticides, herbicides, etc. A surfactant was prepd. by reacting gluconolactone with $\text{Me}_2\text{NCH}_2\text{CH}_2\text{NH}_2$ and quaternizing the tertiary amino group of the resulting gluconamide with 3-[8(or 9)-chloroacetoxytricyclo[5.2.1.0^{2,6}]decan-3(or 4)-yl]-1,1,1,3,5,5,5-heptamethyltrisiloxane.

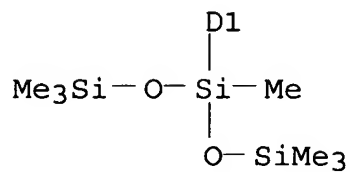
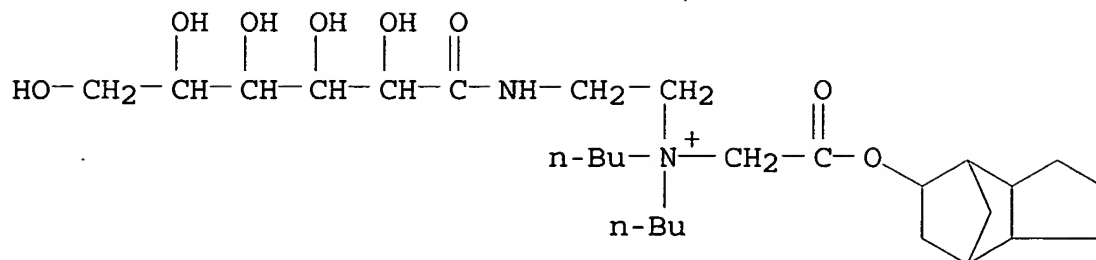
IT **164267-98-5P 164267-99-6P**

(prepn. and uses of surface-active)

RN 164267-98-5 HCA

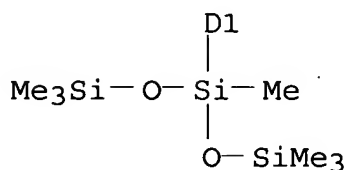
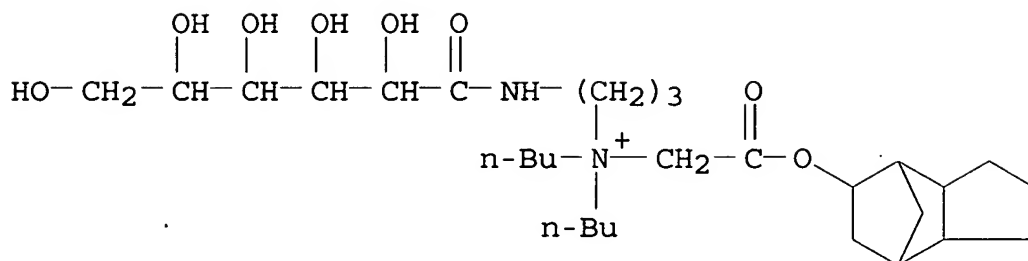
CN 1-Butanaminium, N-butyl-N-[2-(D-gluconoylamino)ethyl]-N-[2-[[octahydro[1,3,3,3-tetramethyl-1-[(trimethylsilyl)oxy]disiloxanyl]-4,7-methano-1H-inden-5-yl]oxy]-2-oxoethyl]-, chloride (9CI) (CA

INDEX NAME)

● Cl⁻

RN 164267-99-6 HCA

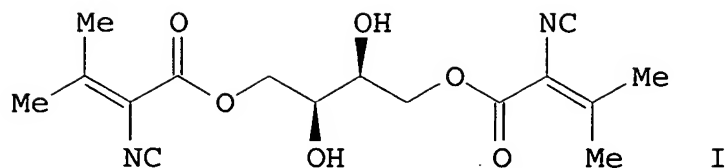
CN 1-Butanaminium, N-butyl-N-[3-(D-gluconoylamino)propyl]-N-[2-
 [[octahydro[1,3,3,3-tetramethyl-1-[(trimethylsilyl)oxy]disiloxanyl]-
 4,7-methano-1H-inden-5-yl]oxy]-2-oxoethyl]-, chloride (9CI) (CA
 INDEX NAME)



● Cl⁻

- IC ICM C07H005-06
 ICS C07H015-04; C07H015-26; C07F007-18; C07F007-10; A01N055-00;
 C11D003-22
- CC 46-3 (Surface Active Agents and Detergents)
 Section cross-reference(s): 29, 33
- IT 164113-50-2P 164113-52-4P 164113-53-5P 164267-95-2P
 164267-96-3P 164267-97-4P **164267-98-5P**
164267-99-6P 164300-80-5P 164300-81-6P
 (prepn. and uses of surface-active)
- L57 ANSWER 22 OF 38 HCA COPYRIGHT 2005 ACS on STN
 121:9865 Synthesis of a biologically active analog of antibiotic
 a-32390A. Baldwin, Jack E.; Adlington, Robert M.; Russell, Andrew
 T.; Smith, Marie L. (Dyson Perrins Lab., Oxford Cent. Mol. Sci.,
 Oxford, OX1 3QY, UK). Journal of the Chemical Society, Chemical
 Communications (1), 85-6 (English) 1994. CODEN: JCCCAT. ISSN:
 0022-4936.

GI



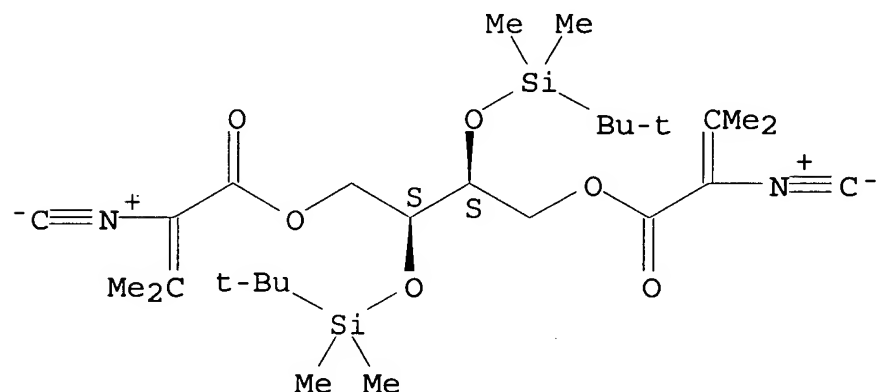
AB The total synthesis of a biol. active analog I of antibiotic A-32390A is described.

IT 155336-13-3P
(prepn. of)

RN 155336-13-3 HCA

CN 2-Butenoic acid, 2-isocyano-3-methyl-, 2,3-bis[[[(1,1-dimethylethyl)dimethylsilyl]oxy]-1,4-butanediyl ester, [S-(R*,R*)]-(9CI) (CA INDEX NAME)

Absolute stereochemistry.



CC 33-6 (Carbohydrates)

IT 155336-08-6P 155336-13-3P 155336-16-6P
(prepn. of)

L57 ANSWER 23 OF 38 HCA COPYRIGHT 2005 ACS on STN

120:247863 Detergent compositions for household cleaners. Kubota, Masakazu; Tsukuda, Kazukuni; Tsumadori, Masaki (Kao Corp, Japan). Jpn. Kokai Tokkyo Koho JP 05279697 A2 19931026 Heisei, 6 pp. (Japanese). CODEN: JKXXAF. APPLICATION: JP 1992-82080 19920403.

AB Detergent compns. comprise alkyl glycoside R1(OR2)xGz (I; R1 = linear or branched C8-18 alkyl, alkenyl; R2 = C2-4 alkylene; G = residue of C5-6 reduced sugar; x = 0-5; z = 1-10) 0.001-2, .gtoreq.1 **betaine**-type amphoteric surfactants selected from R3N+(R4)(R5)(CH2)nX, R3N+(R4)(R5)CH2CH(OH)CH2X,

$R_3CONH(CH_2)_mN^+(R_4)(R_5)(CH_2)_nX$, and $R_3CONH(CH_2)_mN^+(R_4)(R_5)CH_2CH(OH)CH_2X$ ($R_3 = C_8-22$ alkyl, alkenyl; $R_4-5 = C_1-2$ alkyl; $m = 1-4$; $n = 2, 3$; $X = CO_2^-$; SO_3^-) 0.001-2, and volatile or liq. amines 0.01-10%. Thus, a compn. comprising I ($R_1 = C_{10}H_{21}$, $G =$ glucose residue, $x = 0$, $z = 1.4$) 0.05, N,N,N-stearyldimethyl-N-3-sulfopropylammonium **betaine** 0.03, and monoethanolamine 1% was prepd.

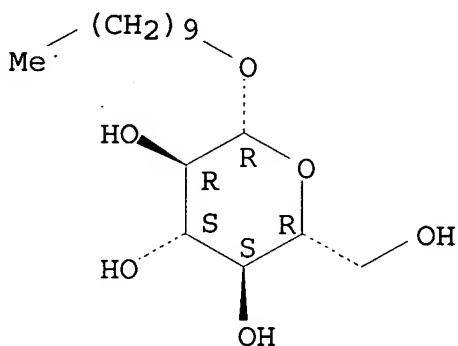
IT 58846-77-8D, oligomeric derivs.

(detergents contg., for household cleaners)

RN 58846-77-8 HCA

CN .beta.-D-Glucopyranoside, decyl (9CI) (CA INDEX NAME)

Absolute stereochemistry.



IC ICM C11D010-02

ICI C11D010-02, C11D001-94, C11D001-68, C11D001-90, C11D007-32;
C11D010-02, C11D001-94, C11D001-68, C11D001-92, C11D007-32

CC 46-6 (Surface Active Agents and Detergents)

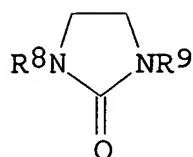
IT 111-42-2, Diethanolamine, uses 141-43-5, Monoethanolamine, uses
13177-41-8, N,N,N-Stearyldimethyl-N-3-sulfopropylammonium
betaine 13197-76-7 58846-77-8D, oligomeric
derivs. 150086-84-3 150197-92-5

(detergents contg., for household cleaners)

L57 ANSWER 24 OF 38 HCA COPYRIGHT 2005 ACS on STN

120:247862 Detergent compositions for household cleaners. Kubota,
Masakazu; Tsukuda, Kazukuni; Tsumadori, Masaki (Kao Corp, Japan).
Jpn. Kokai Tokkyo Koho JP 05279696 A2 19931026 Heisei, 7 pp.
(Japanese). CODEN: JKXXAF. APPLICATION: JP 1992-82079 19920403.

GI



II

AB Detergent compns. with improved foamability comprise (1) alkyl glycoside $R_1(OR_2)_xGw$ [I; R_1 = linear or branched C8-18 alkyl, alkylphenyl; R_2 = C2-4 alkylene; G = residue from C5-6 reducing sugar; x (av.) = 0-5; w (av.) = 1-10] 0.001-2, (2) .gtoreq.1 **betaine**-type amphoteric surfactants selected from $R_3N^+(R_4)(R_5)(CH_2)_nX$, $R_3N^+(R_4)(R_5)CH_2CH(OH)CH_2X$, $R_3CONH(CH_2)_mN^+(R_4)(R_5)(CH_2)_nX$, and $R_3CONH(CH_2)_mN^+(R_4)(R_5)CH_2CH(OH)CH_2X$ [R_3 = C8-22 alkyl, alkenyl; R_4-5 = C1-2 alkyl; m = 1-4; n = 2-3; X = CO_2^- , SO_3^-] 0.001-2, and (3) .gtoreq.1 water-sol. solvents selected from $R_6O(C_2H_4O)_m(C_3H_6O)_nR_7$ (R_6-7 = H, C1-8 alkyl, R_6-7 cannot be H at the same time; 0.ltoreq. m .ltoreq.3, 0.ltoreq. n .ltoreq.3, m and n cannot be 0 at the same time), imidazolidinones (II; R_8-9 = H, C1-3 alkyl), and $R_{10}OCMe_2CH_2CH_2OH$ (R_{10} = C1-3 alkyl) 0.1-50%. Thus, a compn. comprising I (R_1 = C₁₀H₂₁, G = glucose, x = 0, w = 1.4) 0.05, N,N,N-stearyldimethyl-N-3-sulfopropylammonium **betaine** 0.03, and propylene glycol monomethyl ether 3% was prepd.

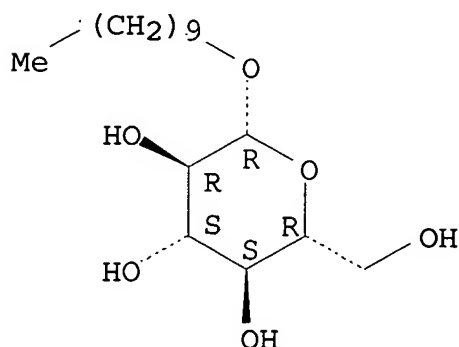
IT 58846-77-8D, oligomeric derivs.

(detergents contg., for household cleaners)

RN 58846-77-8 HCA

CN .beta.-D-Glucopyranoside, decyl (9CI) (CA INDEX NAME)

Absolute stereochemistry.



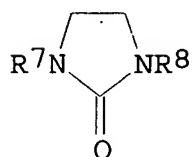
IC ICM C11D010-02

ICI C11D010-02, C11D001-94, C11D001-68, C11D001-90, C11D007-32, C11D007-26

CC 46-6 (Surface Active Agents and Detergents)
IT 112-34-5, Diethylene glycol monobutyl ether 1320-67-8, Propylene glycol monomethyl ether 13177-41-8, N,N,N-Stearyldimethyl-N-3-sulfopropylammonium **betaine** 13197-76-7
58846-77-8D, oligomeric derivs. 150086-84-3 150197-92-5
(detergents contg., for household cleaners)

L57 ANSWER 25 OF 38 HCA COPYRIGHT 2005 ACS on STN
120:194559 Detergent compositions for hard surfaces. Kubota, Masakazu; Tsukuda, Kazukuni; Tsumadori, Masaki (Kao Corp, Japan). Jpn. Kokai Tokkyo Koho JP 05279698 A2 19931026 Heisei, 8 pp. (Japanese).
CODEN: JKXXAF. APPLICATION: JP 1992-82081 19920403.

GI



II

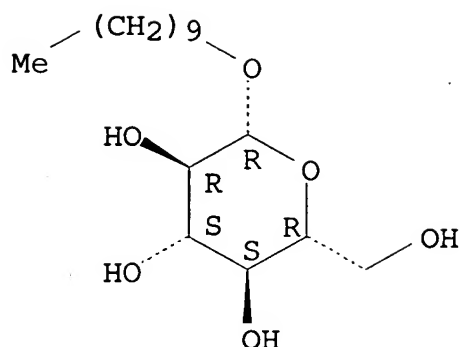
AB The title compns. with good detergency and rinsing property comprise (A) 0.1-10% volatile or liq. amines, (B) 0.001-2% alkyl glycosides R₁(OR₂)_xG_y (I; R₁ = C₈-18 alkyl or alkylphenyl; R₂ = C₂-4 alkylene; G = C₅-6 reducing sugar residue; av. x = 0-5; av. y = 1-10), (C) 0.001-2% .gtoreq.1 amphoteric **betaine** surfactants selected from R₃N+R₄R₅ZX and R₃CONH(CH₂)_mN+R₄R₅ZX [R₃ = C₈-22 alkyl or alkenyl; R₄-5 = C₁-2 alkyl; X = CO₂, SO₃; Z = (CH₂)_n, CH₂CH(OH)CH₂; m = 1-4; n = 2, 3], and 0.1-80% .gtoreq.1 water-sol. solvent selected from R₆O(C₂H₄O)_m(C₃H₆O)_nR₁₀ (R₆, R₁₀ = H, C₁-8 alkyl; R₆ and/or R₁₀ is not H; m, n = 0-3), imidazolidinones II (R₇-8 = C₁-3 alkyl), and R₉OCMe₂CH₂CH₂OH (R₉ = C₁-3 alkyl). Thus, an aq. soln. contg. monoethanolamine 5, I (R₁ = C₁₀H₂₁, G = glucose residue, x = 0, av. y = 1.5) 0.08, N-lauryl-N,N-dimethyl-N-2-hydroxy-3-sulfopropylammonium **betaine** 0.03, and propylene glycol mono-Bu ether 40% showed good detergency and rinsing property when used for washing oil-stained gas range.

IT 58846-77-8D, Decyl glucoside, oligomeric
(liq. detergents contg., with good rinsing property, for hard surfaces)

RN 58846-77-8 HCA

CN .beta.-D-Glucopyranoside, decyl (9CI) (CA INDEX NAME)

Absolute stereochemistry.



- IC ICM C11D010-02
- ICI C11D010-02, C11D001-94, C11D001-68, C11D001-90, C11D007-32, C11D007-26; C11D010-02, C11D001-94, C11D001-68, C11D001-92, C11D007-32, C11D007-26
- CC 46-6 (Surface Active Agents and Detergents)
- ST amine liq detergent hard surface; alkyl glycoside detergent hard surface; **betaine** surfactant cleaner hard surface
- IT Amines, uses
- Betaines**
Glycosides
(liq. detergents contg., with good rinsing property, for hard surfaces)
- IT Detergents
(cleaning compns., liq., contg. amines and glycosides and **betaines**, with good rinsing property, for hard surfaces)
- IT 100-37-8, Diethylaminoethanol 102-71-6, Triethanolamine, uses 110-91-8, Morpholine, uses 111-42-2, Diethanolamine, uses 112-34-5, Diethylene glycol monobutyl ether 141-43-5, Monoethanolamine, uses 143-22-6, Triethylene glycol monobutyl ether 1320-67-8, Propylene glycol monomethyl ether 7664-41-7, Ammonia, uses 13177-41-8 13197-76-7 29387-86-8, Propylene glycol monobutyl ether **58846-77-8D**, Decyl glucoside, oligomeric
(liq. detergents contg., with good rinsing property, for hard surfaces)

L57 ANSWER 26 OF 38 HCA COPYRIGHT 2005 ACS on STN

118:132155 Biodegradable particulate drug vector. Samain, Daniel; De Miguel, Ignacio; Meniali, Jaouad; Ioualalen, Karim; Ding, Li; Cervilla, Monique; Rieumajou, Valerie; Delrieu, Pascal; Imbertie, Laurent (A et S Biovecteurs, Fr.). PCT Int. Appl. WO 9221329 A1 19921210, 42 pp. DESIGNATED STATES: W: CA, JP, KR, US; RW: AT, BE, CH, DE, DK, ES, FR, GB, GR, IT, LU, MC, NL, SE. (French). CODEN: PIXXD2. APPLICATION: WO 1992-FR498 19920604. PRIORITY: FR 1991-6743 19910604.

AB Particulate biodegradable drug vectors comprise an ionic ligand-grafted crosslinked oligo- or polysaccharide core, coated with a covalently-bound semipermeable lipid layer. A 2nd layer, made of amphiphilic compds., is bound to the 1st coat by hydrophobic interactions. A soln. of 500 g amylopectin in 1L 2N NaOH was treated with 28 g epichlorohydrin, followed by pH adjustment to 7 and lyophilization, to obtain a crosslinked gel. This (100 g) was dispersed in 1L 2M NaCl, treated with 85.3 g succinic acid monochloride (prepn. given) and acidified to pH 2 (2N HCl) to give a grafted ionic gel, which was converted into particles. A suspension of 10 g particles in 30 mL CH₂Cl₂ was treated with 0.8 g palmitoyl chloride, to result in a coating. The coated particles (50 mg) were charged with 25 mg butirosin and provided with a 2nd coat by treatment with 50 mg phospholipids, in the presence of 50 nM octyl-D-glucopyranoside.

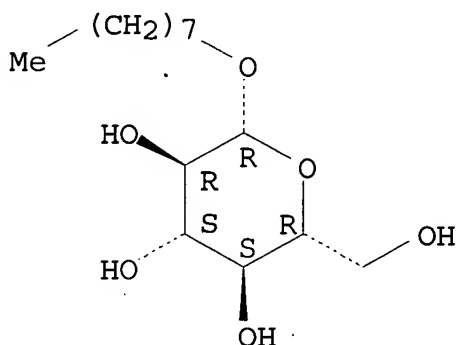
IT 29836-26-8

(in coating of drug vector particles)

RN 29836-26-8 HCA

CN .beta.-D-Glucopyranoside, octyl (9CI) (CA INDEX NAME)

Absolute stereochemistry. Rotation (-).

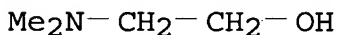


IT 108-01-0D, grafted on crosslinked polysaccharides

(in manuf. of biodegradable drug vectors)

RN 108-01-0 HCA

CN Ethanol, 2-(dimethylamino)- (8CI, 9CI) (CA INDEX NAME)



IC ICM A61K009-50

ICS A61K009-51; A61K009-54; A61K047-48

CC 63-6 (Pharmaceuticals)

IT 29836-26-8

(in coating of drug vector particles)

IT 56-40-6D, Glycine, grafted on crosslinked polysaccharides

56-41-7D, L-Alanine, grafted on crosslinked polysaccharides
 56-84-8D, Aspartic acid, grafted on crosslinked polysaccharides
 56-86-0D, Glutamic acid, grafted on crosslinked polysaccharides
 62-49-7D, Choline, grafted on crosslinked polysaccharides
 108-00-9D, 2-(Dimethylamino)ethylamine, grafted on crosslinked
 polysaccharides **108-01-0D**, grafted on crosslinked
 polysaccharides 110-15-6D, Succinic acid, grafted on crosslinked
 polysaccharides 123-41-1D, grafted on crosslinked polysaccharides
 3033-77-0D, Glycidyl trimethylammonium chloride, reaction product
 with starch, grafted 9004-34-6D, Cellulose, crosslinked, grafted
 9004-53-9D, Dextrin, reaction product with phosphorus oxychloride
 9004-54-0D, Dextran, crosslinked, grafted 9005-25-8D, Starch,
 reaction product with trimethylammonium glycidyl chloride, grafted
 (in manuf. of biodegradable drug vectors)

L57 ANSWER 27 OF 38 HCA COPYRIGHT 2005 ACS on STN

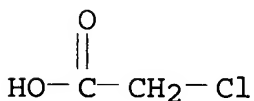
116:135528 Performance-oriented packaging standards; changes to
 classification, hazard communication, packaging and handling
 requirements based on UN standards and agency initiative. (United
 States Dept. of Transportation, Washington, DC, 20590-0001, USA).
 Federal Register, 55(246), 52402-729 (English) 21 Dec 1990. CODEN:
 FEREAC. ISSN: 0097-6326.

AB The hazardous materials regulations under the Federal Hazardous
 Materials Transportation Act are revised based on the United Nations
 recommendations on the transport of dangerous goods. The
 regulations cover the classification of materials, packaging
 requirements, and package marking, labeling, and shipping
 documentation, as well as transportation modes and handling, and
 incident reporting. Performance-oriented stds. are adopted for
 packaging for bulk and nonbulk transportation, and SI units of
 measurement generally replace US customary units. Hazardous
 material descriptions and proper shipping names are tabulated
 together with hazard class, identification nos., packing group,
 label required, special provisions, packaging authorizations,
 quantity limitations, and vessel stowage requirements.

IT 79-11-8, Chloroacetic acid, miscellaneous **108-01-0**
 , Dimethylethanolamine
 (packaging and transport of, stds. for)

RN 79-11-8 HCA

CN Acetic acid, chloro- (8CI, 9CI) (CA INDEX NAME)



RN 108-01-0 HCA

CN Ethanol, 2-(dimethylamino)- (8CI, 9CI) (CA INDEX NAME)

Me₂N-CH₂-CH₂-OH

CC 59-6 (Air Pollution and Industrial Hygiene)
IT 50-00-0, Formaldehyde, miscellaneous 54-11-5, Nicotine 54-11-5D,
Nicotine, compds. 55-63-0, Nitroglycerin 55-68-5, Phenylmercuric
nitrate 56-18-8, 3,3'-Iminodipropylamine 56-23-5, miscellaneous
56-38-2, Parathion 57-06-7, Allyl isothiocyanate 57-14-7
57-24-9D, Strychnine, salts 60-00-4, EDTA, miscellaneous 60-24-2
60-29-7, Diethyl ether, miscellaneous 60-34-4, Methylhydrazine
60-57-1, Dieldrin 62-38-4, Phenylmercuric acetate 62-53-3,
Aniline, miscellaneous 62-74-8, Sodium fluoroacetate 64-17-5,
Ethanol, miscellaneous 64-18-6, Formic acid, miscellaneous
64-18-6D, Formic acid, chloro derivs. 64-19-7, Acetic acid,
miscellaneous 64-67-5, Diethyl sulfate 66-25-1, Hexaldehyde
67-56-1, Methanol, miscellaneous 67-63-0, Isopropanol,
miscellaneous 67-64-1, Acetone, miscellaneous 67-66-3,
Chloroform, miscellaneous 68-11-1, **Thioglycolic acid**,
miscellaneous 68-12-2, N,N-Dimethylformamide, miscellaneous
70-11-1, Phenacyl bromide 70-30-4, Hexachlorophene 71-23-8,
n-Propanol, miscellaneous 71-41-0, 1-Pentanol, miscellaneous
71-43-2, Benzene, miscellaneous 71-55-6, 1,1,1-Trichloroethane
74-82-8, Methane, miscellaneous 74-83-9, miscellaneous 74-84-0,
Ethane, miscellaneous 74-85-1, Ethylene, miscellaneous 74-86-2,
Acetylene, miscellaneous 74-87-3, Methyl chloride, miscellaneous
74-88-4, Methyl iodide, miscellaneous 74-89-5, Methylamine,
miscellaneous 74-90-8, Hydrogen cyanide, miscellaneous 74-93-1,
Methyl mercaptan, miscellaneous 74-95-3, Dibromomethane 74-96-4,
Ethyl bromide 74-97-5, Bromochloromethane 74-98-6, Propane,
miscellaneous 75-00-3, Ethyl chloride 75-01-4, miscellaneous
75-02-5, Vinyl fluoride 75-04-7, Ethylamine, miscellaneous
75-05-8, Methyl cyanide, miscellaneous 75-07-0, Acetaldehyde,
miscellaneous 75-08-1, Ethyl mercaptan 75-09-2, Dichloromethane,
miscellaneous 75-15-0, Carbon disulfide, miscellaneous 75-16-1,
Methyl magnesium bromide 75-18-3, Dimethyl sulfide 75-19-4,
Cyclopropane 75-20-7, Calcium carbide 75-21-8, Ethylene oxide,
miscellaneous 75-21-8 75-25-2, Bromoform 75-26-3,
2-Bromopropane 75-28-5, Isobutane 75-28-5D, Isobutane, mixts.
75-29-6, 2-Chloropropane 75-31-0, Isopropylamine, miscellaneous
75-33-2, Isopropyl mercaptan 75-34-3, 1,1-Dichloroethane
75-35-4, miscellaneous 75-36-5, Acetyl chloride 75-38-7,
1,1-Difluoroethylene 75-39-8, Acetaldehyde ammonia 75-43-4,
Dichloromonofluoromethane 75-44-5, Phosgene 75-45-6,
Chlorodifluoromethane 75-46-7, Trifluoromethane 75-50-3,
Trimethylamine, miscellaneous 75-52-5, Nitromethane, miscellaneous
75-54-7, Methylchlorosilane 75-55-8, Propylenimine 75-56-9,
Propylene oxide, miscellaneous 75-59-2, Tetramethylammonium

hydroxide 75-60-5, Cacodylic acid 75-61-6,
Dibromodifluoromethane 75-63-8 75-71-8, Dichlorodifluoromethane
75-72-9, Chlorotrifluoromethane 75-73-0, Tetrafluoromethane
75-76-3, Tetramethylsilane 75-77-4, Trimethylchlorosilane,
miscellaneous 75-78-5, Dimethyldichlorosilane 75-79-6,
Methyltrichlorosilane 75-83-2 75-86-5, Acetone cyanohydrin
75-87-6, Chloral 75-91-2, tert-Butyl hydroperoxide 75-94-5,
Vinyltrichlorosilane 76-01-7, Pentachloroethane 76-02-8,
Trichloroacetyl chloride 76-03-9, properties 76-05-1,
Trifluoroacetic acid, miscellaneous 76-06-2, Chloropicrin
76-06-2D, Chloropicrin, mixts. 76-15-3 76-16-4, Hexafluoroethane
76-19-7, Octafluoropropane 76-22-2, Camphor 77-47-4,
Hexachlorocyclopentadiene 77-73-6 77-78-1, Dimethyl sulfate
78-00-2, Tetraethyl lead 78-10-4, Tetraethyl silicate 78-62-6,
Dimethyldiethoxysilane 78-67-1, Azodiisobutyronitrile 78-76-2,
2-Bromobutane 78-78-4, Isopentane 78-79-5, Isoprene,
miscellaneous 78-81-9, Isobutylamine 78-82-0, Isobutyronitrile
78-83-1, Isobutanol, miscellaneous 78-84-2, Isobutyraldehyde
78-85-3, Methacrylaldehyde 78-87-5, Propylene dichloride
78-89-7, Propylene chlorohydrin 78-90-0, 1,2-Propylenediamine
78-93-3, 2-Butanone, miscellaneous 78-94-4, Methyl vinyl ketone,
miscellaneous 78-95-5, Monochloroacetone 79-01-6,
Trichloroethylene, miscellaneous 79-03-8, Propionyl chloride
79-04-9, Chloroacetyl chloride 79-06-1, Acrylamide, miscellaneous
79-08-3, Bromoacetic acid 79-09-4, Propionic acid, miscellaneous
79-10-7, 2-Propenoic acid, miscellaneous 79-11-8,
Chloroacetic acid, miscellaneous 79-20-9, Methyl acetate
79-21-0, Peroxyacetic acid 79-22-1 79-24-3, Nitroethane
79-29-8, 2,3-Dimethylbutane 79-30-1, Isobutyryl chloride
79-31-2, Isobutyric acid 79-36-7, Dichloroacetyl chloride
79-38-9 79-41-4, miscellaneous 79-42-5 79-43-6, Dichloroacetic
acid, miscellaneous 79-44-7, Dimethylcarbamoyl chloride 80-10-4,
Diphenyldichlorosilane 80-15-9, Cumene hydroperoxide 80-17-1,
Benzene sulfohydrazide 80-47-7, p-Menthane hydroperoxide
80-51-3, Diphenyloxide-4,4'-disulfohydrazide 80-56-8,
.alpha.-Pinene 80-62-6 81-15-2 82-71-3 85-44-9,
1,3-Isobenzofurandione 86-50-0, Azinphos methyl 87-68-3,
Hexachlorobutadiene 87-90-1 88-17-5, 2-Trifluoromethylaniline
88-72-2, o-Nitrotoluene 88-73-3, o-Chloronitrobenzene 88-74-4,
o-Nitroaniline 88-75-5, o-Nitrophenol 88-89-1 89-58-7,
p-Nitroxyline 91-17-8, Decahydronaphthalene 91-20-3,
Naphthalene, miscellaneous 91-20-3D, Naphthalene, diozonide
derivs. 91-22-5, Quinoline, miscellaneous 91-59-8,
.beta.-Naphthylamine 91-66-7, N,N-Diethylaniline 92-52-4D,
Biphenyl, chloro derivs. 92-52-4D, Biphenyl, halo derivs.
92-59-1, N-Ethyl-N-benzylaniline 92-87-5, Benzidine 93-58-3,
Methyl benzoate 94-17-7, p-Chlorobenzoyl peroxide 94-36-0,
Benzoyl peroxide, miscellaneous 95-48-7, miscellaneous 95-50-1,

o-Dichlorobenzene 95-54-5, o-Phenylenediamine, miscellaneous
 95-55-6, o-Aminophenol 95-80-7 95-85-2, 2-Amino-4-chlorophenol
 96-12-8, Dibromochloropropane 96-22-0, Diethyl ketone 96-23-1
 96-24-2, Glycerol .alpha.-monochlorohydrin 96-32-2, Methyl
 bromoacetate 96-33-3 96-34-4, Methyl chloroacetate 96-37-7,
 Methyl cyclopentane 96-41-3, Cyclopentanol 97-62-1, Ethyl
 isobutyrate 97-63-2 97-64-3, Ethyl lactate 97-72-3, Isobutyric
 anhydride 97-85-8, Isobutyl isobutyrate 97-86-9 97-88-1
 97-95-0 97-96-1, 2-Ethylbutyraldehyde 98-00-0, Furfuryl alcohol
 98-01-1, Furfural, miscellaneous 98-07-7, Benzotrichloride
 98-08-8, Benzotrifluoride 98-09-9, Benzene sulfonyl chloride
 98-12-4, Cyclohexyltrichlorosilane 98-13-5, Phenyltrichlorosilane
 98-16-8, 3-Trifluoromethylaniline 98-82-8, Isopropylbenzene
 98-83-9, miscellaneous 98-85-1, .alpha.-Methylbenzyl alcohol
 98-87-3, Benzylidene chloride 98-88-4, Benzoyl chloride 98-94-2
 98-95-3, Nitrobenzene, miscellaneous 99-08-1, m-Nitrotoluene
 99-09-2, m-Nitroaniline 99-35-4, Trinitrobenzene 99-99-0,
 p-Nitrotoluene 100-00-5 100-01-6, p-Nitroaniline, miscellaneous
 100-02-7, p-Nitrophenol, miscellaneous 100-17-4 100-34-5,
 Benzene diazonium chloride 100-36-7, N,N-Diethylethylenediamine
 100-37-8, Diethylaminoethanol 100-39-0, Benzyl bromide 100-41-4,
 Ethylbenzene, miscellaneous

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IT 100-42-5, miscellaneous 100-44-7, Benzyl chloride, miscellaneous
 100-47-0, Benzonitrile, miscellaneous 100-50-5,
 1,2,3,6-Tetrahydrobenzaldehyde 100-57-2, Phenylmercuric hydroxide
 100-61-8, N-Methylaniline, miscellaneous 100-63-0, Phenylhydrazine
 100-66-3, Anisole, miscellaneous 100-73-2, Acrolein dimer
 101-25-7, N,N'-Dinitrosopentamethylenetetramine 101-68-8
 101-77-9, 4,4'-Diaminodiphenyl methane 101-83-7, Dicyclohexylamine
 102-69-2, Tripropylamine 102-70-5, Triallylamine 102-81-8,
 Dibutylaminoethanol 102-82-9, Tributylamine 103-65-1,
 n-Propylbenzene 103-69-5, N-Ethylaniline 103-71-9,
 Phenylisocyanate, miscellaneous 103-80-0, Phenylacetyl chloride
 103-83-3, Benzyldimethylamine 104-15-4, Toluene sulfonic acid,
 miscellaneous 104-51-8, Butylbenzene 104-75-6, 2-Ethylhexylamine
 104-78-9 104-90-5, 2-Methyl-5-ethylpyridine 105-36-2 105-37-3,
 Ethyl propionate 105-39-5, Ethyl chloroacetate 105-48-6,
 Isopropyl chloroacetate 105-54-4, Ethyl butyrate 105-56-6, Ethyl
 cyanoacetate 105-57-7, Acetal 105-58-8, Diethyl carbonate
 105-64-6, Isopropyl peroxydicarbonate 105-74-8, Lauroyl peroxide
 106-31-0, Butyric anhydride 106-44-5, p-Cresol, miscellaneous
 106-46-7, p-Dichlorobenzene 106-50-3, p-Phenylenediamine,
 miscellaneous 106-51-4, 2,5-Cyclohexadiene-1,4-dione,
 miscellaneous 106-63-8, Isobutyl acrylate 106-68-3, Ethyl amyl
 ketone 106-88-7, 1,2-Butylene oxide 106-89-8, miscellaneous
 106-92-3, Allyl glycidyl ether 106-93-4, Ethylene dibromide
 106-95-6, Allyl bromide, miscellaneous 106-96-7, 3-Bromopropyne

106-97-8, Butane, miscellaneous 106-97-8D, Butane, mixts.
106-99-0, 1,3-Butadiene, miscellaneous 107-00-6, Ethylacetylene
107-02-8, 2-Propenal, miscellaneous 107-05-1, Allyl chloride
107-06-2, Ethylene dichloride, miscellaneous 107-07-3, Ethylene
chlorohydrin, miscellaneous 107-10-8, Propylamine, miscellaneous
107-11-9, Allylamine 107-12-0, Propionitrile 107-13-1,
Acrylonitrile, miscellaneous 107-14-2, Chloroacetonitrile
107-15-3, Ethylenediamine, miscellaneous 107-18-6, Allyl alcohol,
miscellaneous 107-19-7, Propargyl alcohol 107-20-0,
Chloroacetaldehyde 107-25-5, Vinylmethyl ether 107-29-9,
Acetaldehyde oxime 107-30-2, Methylchloromethyl ether 107-31-3,
Methyl formate 107-37-9, Allyltrimethylchlorosilane 107-49-3,
Tetraethyl pyrophosphate 107-70-0 107-71-1, tert-Butyl
peroxylacetate 107-72-2, Amyltrimethylchlorosilane 107-81-3,
2-Bromopentane 107-82-4, 1-Bromo-3-methylbutane 107-87-9, Methyl
propyl ketone 107-89-1, Aldol 107-92-6, Butyric acid,
miscellaneous 108-01-0, Dimethylethanolamine 108-05-4,
Acetic acid ethenyl ester, miscellaneous 108-09-8,
1,3-Dimethylbutylamine 108-10-1, Methyl isobutyl ketone
108-11-2, Methyl isobutyl carbinol 108-18-9, Diisopropylamine
108-20-3, Diisopropyl ether 108-21-4, Isopropyl acetate
108-22-5, Isopropenyl acetate 108-23-6, Isopropyl chloroformate
108-24-7, Acetic anhydride 108-31-6, 2,5-Furandione, miscellaneous
108-39-4, miscellaneous 108-45-2, m-Phenylenediamine,
miscellaneous 108-46-3, Resorcinol, miscellaneous 108-67-8,
miscellaneous 108-77-0 108-83-8, Diisobutyl ketone 108-84-9
108-86-1, Benzene, bromo-, miscellaneous 108-87-2, Methyl
cyclohexane 108-88-3, Toluene, miscellaneous 108-90-7,
Chlorobenzene, miscellaneous 108-91-8, Cyclohexylamine,
miscellaneous 108-94-1, Cyclohexanone, miscellaneous 108-95-2,
Phenol, miscellaneous 108-98-5, Phenyl mercaptan, miscellaneous
109-02-4 109-09-1, 2-Chloropyridine 109-13-7, tert-Butyl
peroxyisobutyrate 109-52-4, Valeric acid, miscellaneous
109-53-5, Vinyl isobutyl ether 109-60-4, n-Propyl acetate
109-61-5, n-Propyl chloroformate 109-63-7, Boron trifluoride
diethyl etherate 109-65-9, n-Butyl bromide 109-66-0, Pentane,
miscellaneous 109-70-6, 1-Chloro-3-bromopropane 109-73-9,
n-Butylamine, miscellaneous 109-74-0, Butyronitrile 109-77-3,
Malononitrile 109-79-5, Butyl mercaptan 109-86-4, Ethylene
glycol monomethyl ether 109-87-5, Methylal 109-89-7,
Diethylamine, miscellaneous 109-90-0, Ethyl isocyanate 109-92-2,
Vinyl ethyl ether 109-93-3, Divinyl ether 109-94-4, Ethyl
formate 109-95-5, Ethyl nitrite 109-99-9, Tetrahydrofuran,
miscellaneous 110-00-9, Furan 110-01-0, Tetrahydrothiophene
110-02-1, Thiophene 110-12-3, 5-Methylhexan-2-one 110-16-7,
Maleic acid, miscellaneous 110-18-9 110-19-0 110-22-5,
Diacetyl peroxide 110-43-0, Amyl methyl ketone 110-49-6
110-54-3, Hexane, miscellaneous 110-58-7, Amylamine 110-62-3,

Valeraldehyde 110-66-7, Amyl mercaptan 110-68-9,
N-Methylbutylamine 110-69-0, Butyraldoxime 110-71-4,
1,2-Dimethoxyethane 110-74-7, Propyl formate 110-78-1, n-Propyl
isocyanate 110-80-5, Ethylene glycol monoethyl ether
110-82-7, Cyclohexane, miscellaneous 110-83-8, Cyclohexene,
miscellaneous 110-85-0, Piperazine, miscellaneous 110-86-1,
Pyridine, miscellaneous 110-87-2 110-89-4, Piperidine,
miscellaneous 110-91-8, Morpholine, miscellaneous 110-96-3,
Diisobutylamine 111-15-9, Ethylene glycol monoethyl
ether acetate 111-34-2, Butylvinyl ether 111-36-4, n-Butyl
isocyanate 111-40-0 111-43-3, Dipropyl ether 111-49-9,
Hexamethylenimine 111-65-9, Octane, miscellaneous 111-69-3,
Adiponitrile 111-71-7, n-Heptaldehyde 111-76-2, Ethylene
glycol monobutyl ether 111-92-2, Di-n-butylamine
112-04-9 112-24-3, Triethylenetetramine 112-57-2 115-07-1,
Propylene, miscellaneous 115-10-6, Dimethyl ether 115-11-7,
Isobutylene, miscellaneous 115-21-9, Ethyltrichlorosilane
115-25-3, Octafluorocyclobutane 116-14-3, Tetrafluoroethylene,
miscellaneous 116-15-4, Hexafluoropropylene 116-16-5,
Hexachloroacetone 116-54-1, Methyl dichloroacetate 118-74-1,
Hexachlorobenzene 118-96-7, Trinitrotoluene 120-92-3,
Cyclopentanone 121-43-7, Trimethyl borate 121-44-8,
Triethylamine, miscellaneous 121-45-9, Trimethyl phosphite
121-46-0, 2,5-Norbornadiene 121-69-7, N,N-Dimethylaniline,
miscellaneous 121-73-3 121-82-4, Cyclotrimethylenetrinitramine
122-51-0, Ethyl orthoformate 122-52-1, Triethyl phosphite
123-00-2, 4-Morpholinepropanamine 123-15-9 123-19-3,
Dipropylketone 123-20-6, Vinyl butyrate 123-23-9, Succinic acid
peroxide 123-30-8, p-Aminophenol 123-31-9, Hydroquinone,
miscellaneous 123-38-6, Propionaldehyde, miscellaneous 123-42-2,
Diacetone alcohol 123-54-6, 2,4-Pentanedione, miscellaneous
123-62-6, Propionic anhydride 123-63-7, Paraldehyde 123-72-8,
Butyraldehyde 123-75-1, Pyrrolidine, miscellaneous 123-86-4,
Butyl acetate 123-91-1, Dioxane, miscellaneous 124-02-7,
Diallylamine 124-09-4, Hexamethylenediamine, miscellaneous
124-13-0, Octyl aldehyde 124-18-5, n-Decane 124-38-9, Carbon
dioxide, miscellaneous 124-40-3, Dimethylamine, miscellaneous
124-41-4, Sodium methylate 124-43-6 124-47-0, Urea nitrate
124-65-2, Sodium cacodylate 126-98-7, Methacrylonitrile
126-99-8, Chloroprene 127-18-4, Tetrachloroethylene, miscellaneous
127-85-5, Sodium arsanilate 129-79-3 131-52-2, Sodium
pentachlorophenate 131-73-7, Hexanitrodiphenylamine 131-74-8,
Ammonium picrate 133-14-2 133-55-1, N,N'-Dinitroso-N,N'-dimethyl
terephthalamide 134-32-7, .alpha.-Naphthylamine 138-86-3,
Dipentene 138-89-6 139-02-6, Sodium phenolate 140-29-4,
Phenylacetonitrile 140-31-8, 1-Piperazineethanamine 140-80-7
140-88-5 141-32-2

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IT 141-43-5, Ethanolamine, miscellaneous 141-57-1,
Propyltrichlorosilane 141-59-3, tert-Octylmercaptan 141-75-3,
Butyryl chloride 141-78-6, Ethyl acetate, miscellaneous
141-79-7, Mesityl oxide 142-04-1, Aniline hydrochloride
142-29-0, Cyclopentene 142-62-1, Hexanoic acid, miscellaneous
142-82-5, Heptane, miscellaneous 142-84-7, Dipropylamine
142-96-1, Dibutyl ether 143-33-9, Sodium cyanide 144-49-0,
Fluoroacetic acid 144-62-7D, Ethanedioic acid, salts 146-84-9,
Silver picrate 149-74-6, Methylphenyldichlorosilane 151-50-8,
Potassium cyanide 151-56-4, Ethylenimine, miscellaneous
156-62-7, Calcium cyanamide 260-94-6, Acridine 283-66-9,
Hexamethylene triperoxide diamine 287-23-0, Cyclobutane
287-92-3, Cyclopentane 291-64-5, Cycloheptane 298-00-0, Methyl
parathion 298-07-7 302-01-2, Hydrazine, miscellaneous
309-00-2, Aldrin 352-93-2, Diethyl sulfide 353-36-6, Ethyl
fluoride 353-42-4, Boron trifluoride dimethyl etherate 353-50-4,
Carbonyl fluoride 353-59-3 354-32-5, Trifluoroacetylchloride
357-57-3, Brucine 360-89-4, Octafluorobut-2-ene 428-59-1,
Hexafluoropropylene oxide 431-03-8, Butanedione 460-19-5,
Cyanogen 462-06-6, Fluorobenzene 462-08-8, m-Aminopyridine
462-95-3, Diethoxymethane 463-04-7, Amyl nitrite 463-49-0,
Propadiene 463-58-1, Carbonyl sulfide 463-71-8, Thiophosgene
463-82-1, 2,2-Dimethylpropane 479-45-8 501-53-1, Benzyl
chloroformate 502-98-7D, salts 503-74-2, Isopentanoic acid
504-24-5, 4-Pyridinamine 504-29-0, 2-Pyridinamine 506-64-9,
Silver cyanide (Ag(CN)) 506-68-3, Cyanogen bromide 506-77-4,
Cyanogen chloride 506-85-4, Fulminic acid 506-93-4, Guanidine
nitrate 506-96-7, Acetyl bromide 507-02-8, Acetyl iodide
507-09-5, Thioacetic acid, miscellaneous 507-70-0, Borneol
509-14-8, Tetranitromethane 512-85-6, Ascaridole 513-35-9,
2-Methyl-2-butene 513-38-2 513-42-8, Methallyl alcohol
513-48-4, 2-Iodobutane 513-86-0, Acetyl methyl carbinol
517-25-9, Trinitromethane 517-92-0, 1,8-Dihydroxy-2,4,5,7-
tetranitroanthraquinone 519-44-8D, 2,4-Dinitroresorcinol, heavy
metal salts 532-27-4, Chloracetophenone 533-51-7, Silver oxalate
534-07-6, 1,3-Dichloroacetone 534-15-6, 1,1-Dimethoxyethane
534-22-5, 2-Methylfuran 535-13-7, Ethyl-2-chloropropionate
540-18-1, Amyl butyrate 540-42-1, Isobutyl propionate 540-54-5,
Propyl chloride 540-67-0, Ethyl methyl ether 540-73-8
540-82-9, Ethylsulfuric acid 540-84-1, Isooctane 541-41-3, Ethyl
chloroformate 542-55-2, Isobutyl formate 542-62-1, Barium
cyanide 542-88-1, Dichlorodimethyl ether, symmetrical 543-27-1,
Isobutyl chloroformate 543-59-9, Amyl chloride 544-16-1, Butyl
nitrite 544-25-2, Cycloheptatriene 544-97-8, Dimethyl zinc
545-55-1, Tris(1-aziridinyl)phosphine oxide 554-12-1, Methyl
propionate 554-84-7, m-Nitrophenol 555-54-4, Magnesium diphenyl
556-24-1, Methyl isovalerate 556-56-9, Allyl iodide 556-61-6,
Methyl isothiocyanate 556-88-7 556-89-8, Nitrourea 557-17-5,

Methyl propyl ether 557-19-7, Nickel cyanide (Ni(CN)₂) 557-20-0, Diethylzinc 557-21-1, Zinc cyanide 557-31-3, Allyl ethyl ether 557-40-4, Diallylether 557-98-2, 2-Chloropropene 558-13-4, Carbon tetrabromide 563-45-1, 3-Methyl-1-butene 563-46-2, 2-Methyl-1-butene 563-47-3, Methyl allyl chloride 563-80-4, 3-Methylbutan-2-one 578-54-1, 2-Ethylaniline 578-94-9, Diphenylamine chloroarsine 582-61-6, Benzoyl azide 583-15-3, Mercury benzoate 584-79-2, Allethrin 585-79-5, 1-Bromo-3-nitrobenzene 586-62-9, Terpinolene 587-85-9D, compds. 590-01-2, Butylpropionate 590-36-3, 2-Methylpentan-2-ol 591-27-5, m-Aminophenol 591-87-7, Allyl acetate 591-89-9, Mercuric potassium cyanide 592-01-8, Calcium cyanide 592-05-2, Lead cyanide (Pb(CN)₂) 592-34-7, n-Butylchloroformate 592-41-6, 1-Hexene, miscellaneous 592-55-2, 2-Bromoethyl ethyl ether 592-63-2 592-84-7, n-Butylformate 593-53-3, Methyl fluoride 593-60-2, Vinyl bromide 593-89-5, Methylchloroarsine 594-42-3, Perchloromethylmercaptan 594-72-9, 1,1-Dichloro-1-nitroethane 598-14-1, Ethylchloroarsine 598-21-0, Bromoacetyl bromide 598-31-2, Bromoacetone 598-57-2, Methyl nitramine 598-57-2D, Methyl nitramine, metal salts 598-58-3, Methyl nitrate 598-73-2, Bromotrifluoroethylene 598-78-7, .alpha.-Chloropropionic acid 598-99-2, Methyl trichloroacetate 602-96-0, 1,3,5-Trimethyl-2,4,6-trinitrobenzene 602-99-3, Trinitro-m-cresol 602-99-3D, Methyl picric acid, heavy metal salts 608-50-4, 2,4-Dinitro-1,3,5-trimethylbenzene 610-38-8, 4-Bromo-1,2-dinitrobenzene 616-38-6, Dimethyl carbonate 616-74-0D, 4,6-Dinitroresorcinol, heavy metal salts 617-37-8 617-50-5, Isopropyl isobutyrate 617-89-0, Furfurylamine 619-97-6, Benzene diazonium nitrate 620-05-3, Benzyl iodide 622-44-6, Phenylcarbylamine chloride 622-45-7, Cyclohexyl acetate 623-42-7, Methyl butyrate 623-87-0, Glycerol-1,3-dinitrate 624-61-3, Dibromoacetylene 624-74-8, Diiodoacetylene 624-83-9, Methyl isocyanate 624-91-9, Methyl nitrite 624-92-0, Dimethyl disulfide 625-76-3, Dinitromethane 626-67-5, 1-Methylpiperidine 627-13-4, n-Propyl nitrate 627-30-5 627-63-4, Fumaryl chloride 628-28-4, Butyl methyl ether 628-32-0, Ethyl propyl ether 628-63-7, Amyl acetate 628-81-9, Ethyl butyl ether 628-86-4, Mercury fulminate 628-92-2, Cycloheptene 628-96-6, Ethylene glycol dinitrate 629-13-0, 1,2-Diazidoethane 629-14-1 629-20-9, Cyclooctatetraene 630-08-0, Carbon monoxide, miscellaneous 630-72-8, Trinitroacetonitrile 637-78-5, Isopropyl propionate 638-11-9, Isopropyl butyrate 638-29-9, Valeryl chloride 638-49-3, Amyl formate 641-16-7, 2,3,4,6-Tetranitrophenol 644-31-5, Acetyl benzoyl peroxide 644-97-3, Phenyl phosphorus dichloride 645-55-6, N-Nitroaniline 646-06-0, Dioxolane 674-81-7, Nitrosoguanidine 674-82-8, Diketene 676-83-5, Methyl phosphonous dichloride 676-97-1, Methyl phosphonic dichloride 676-98-2, Methyl phosphonothioic dichloride 677-71-4, Hexafluoroacetone

hydrate 681-84-5, Methyl orthosilicate 684-16-2,
 Hexafluoroacetone 693-21-0, Diethylene glycol dinitrate
 694-05-3, 1,2,3,6-Tetrahydropyridine 757-58-4, Hexaethyl
 tetraphosphate 762-12-9, Decanoyl peroxide 762-13-0, Pelargonyl
 peroxide 762-16-3 765-34-4, Glycidaldehyde 766-09-6,
 1-Ethylpiperidine 771-29-9, Tetralin hydroperoxide 776-74-9,
 Diphenylmethyl bromide 814-78-8, Methyl isopropenyl ketone
 822-06-0 831-52-7, Sodium picramate 883-40-9,
 Diazodiphenylmethane 918-37-6, Hexanitroethane 918-54-7,
 Trinitroethanol 926-63-6 926-64-7, 2-Dimethylaminoacetonitrile
 928-65-4, Hexyltrichlorosilane 929-06-6, 2-(2-Aminoethoxy)ethanol
 993-00-0, Methylchlorosilane 993-12-4 993-43-1, Ethyl
 phosphonothioic dichloride 1002-16-0, Amyl nitrate 1070-19-5,
 tert-Butoxycarbonyl azide 1120-21-4, Undecane 1125-27-5
 1126-78-9 1187-93-5, Perfluoromethyl vinyl ether 1299-86-1,
 Aluminum carbide 1300-64-7, Anisoyl chloride 1300-71-6, Xylenol
 1300-73-8D, derivs. 1303-28-2, Arsenic pentoxide 1303-33-9,
 Arsenic sulfide

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IT 7705-07-9D, Titanium trichloride, mixts. 7705-08-0, Ferric
 chloride, miscellaneous 7718-98-1, Vanadium trichloride
 7719-09-7, Thionyl chloride 7719-12-2, Phosphorus trichloride
 7722-64-7, Potassium permanganate 7722-84-1, Hydrogen peroxide
 (H₂O₂), miscellaneous 7723-14-0, Phosphorus, miscellaneous
 7726-95-6, Bromine, miscellaneous 7727-15-3, Aluminum bromide
 7727-18-6, Vanadium oxytrichloride 7727-21-1, Potassium persulfate
 7727-37-9, Nitrogen, miscellaneous 7727-37-9D, Nitrogen, mixts.
 with rare gases 7727-54-0, Ammonium persulfate 7738-94-5,
 Chromic acid (H₂CrO₄) 7756-94-7, Triisobutylene 7757-79-1,
 Potassium nitrate, miscellaneous 7758-01-2, Potassium bromate
 7758-09-0, Potassium nitrite 7758-19-2, Sodium chlorite
 7758-94-3, Ferrous chloride 7761-88-8, Silver nitrate,
 miscellaneous 7773-03-7, Potassium bisulfite 7775-09-9, Sodium
 chlorate 7775-14-6, Sodium dithionite 7778-39-4, Arsenic acid
 7778-44-1, Calcium arsenate 7778-54-3, Calcium hypochlorite
 7778-66-7 7778-74-7, Potassium perchlorate 7779-86-4, Zinc
 dithionite 7779-88-6, Zinc nitrate 7782-39-0, Deuterium,
 miscellaneous 7782-41-4, Fluorine, miscellaneous 7782-44-7,
 Oxygen, miscellaneous 7782-44-7D, Oxygen, mixts. with rare gases
 7782-49-2, Selenium, miscellaneous 7782-50-5, Chlorine,
 miscellaneous 7782-65-2, Germane 7782-78-7, Nitrosylsulfuric
 acid 7782-79-8D, Hydrazoic acid, copper complexes 7782-99-2,
 Sulfurous acid, miscellaneous 7783-06-4, Hydrogen sulfide,
 miscellaneous 7783-07-5, Hydrogen selenide (H₂Se) 7783-08-6,
 Selenic acid 7783-33-7 7783-41-7, Oxygen difluoride 7783-54-2,
 Nitrogen trifluoride 7783-56-4, Antimony trifluoride 7783-60-0,
 Sulfur tetrafluoride 7783-61-1, Silicon tetrafluoride 7783-66-6,
 Iodine pentafluoride 7783-70-2, Antimony pentafluoride

7783-79-1, Selenium hexafluoride 7783-80-4, Tellurium hexafluoride
7783-81-5, Uranium hexafluoride 7783-82-6, Tungsten hexafluoride
7783-91-7, Silver chlorite 7784-08-9 7784-21-6, Aluminum hydride
7784-30-7, Aluminum phosphate 7784-42-1, Arsine 7784-46-5,
Sodium arsenite 7786-30-3D, Magnesium chloride (MgCl₂), mixt. with
chlorates 7787-36-2, Barium permanganate 7787-41-9, Barium
selenate 7787-71-5, Bromine trifluoride 7788-97-8, Chromic
fluoride 7789-09-5, Ammonium dichromate 7789-18-6, Cesium
nitrate 7789-21-1, Fluorosulfonic acid 7789-23-3, Potassium
fluoride 7789-29-9, Potassium bifluoride 7789-30-2, Bromine
pentafluoride 7789-38-0, Sodium bromate 7789-59-5, Phosphorus
oxybromide 7789-60-8, Phosphorus tribromide 7789-61-9, Antimony
tribromide 7789-69-7, Phosphorus pentabromide 7789-78-8, Calcium
hydride 7790-59-2 7790-69-4, Lithium nitrate 7790-91-2,
Chlorine trifluoride 7790-93-4, Chloric acid 7790-94-5,
Chlorosulfonic acid 7790-98-9, Ammonium perchlorate 7790-99-0,
Iodine monochloride 7791-10-8, Strontium chlorate 7791-23-3,
Selenium oxychloride 7791-25-5, Sulfuryl chloride 7791-27-7,
Disulfuryl chloride 7803-51-2, Phosphine 7803-52-3, Stibine
7803-54-5, Magnesium diamide 7803-55-6, Ammonium metavanadate
7803-57-8, Hydrazine hydrate 7803-62-5, Silane, miscellaneous
7803-63-6, Ammonium hydrogen sulfate 8004-09-9 8006-19-7, Amatol
8006-28-8, Soda lime 8007-56-5, Nitrohydrochloric acid 8007-58-7
8012-74-6, London Purple 8014-95-7, Fuming sulfuric acid
8049-17-0, Ferrosilicon 8050-88-2, Celluloid 8063-77-2
8065-53-0, Hexolite 8066-33-9, Pentolite 8070-50-6 9003-53-6,
Polystyrene 9004-70-0, Collodion 9056-38-6, Nitrostarch
9080-17-5, Ammonium polysulfide 10022-31-8, Barium nitrate
10024-97-2, Nitrogen oxide (N₂O), properties 10025-78-2,
Trichlorosilane 10025-85-1, Nitrogen trichloride 10025-87-3,
Phosphorus oxychloride 10025-91-9, Antimony trichloride
10026-04-7, Silicon tetrachloride 10026-11-6, Zirconium
tetrachloride 10026-13-8, Phosphorus pentachloride 10031-13-7
10031-87-5, 2-Ethylbutyl acetate 10034-81-8, Magnesium perchlorate
10034-85-2, Hydrogen iodide 10035-10-6, Hydrogen bromide,
miscellaneous 10039-54-0, Hydroxylamine sulfate 10042-76-9,
Strontium nitrate 10045-94-0, Mercuric nitrate 10049-04-4,
Chlorine dioxide 10099-74-8, Lead nitrate 10101-50-5
10102-06-4, Uranyl nitrate 10102-12-2, Selenium nitride
10102-18-8, Sodium selenite 10102-43-9, Nitric oxide,
miscellaneous 10102-44-0, Nitrogen dioxide, miscellaneous
10102-49-5, Ferric arsenate 10102-50-8, Ferrous arsenate
10103-50-1, Magnesium arsenate 10118-76-0 10124-37-5, Calcium
nitrate 10124-48-8, Mercury ammonium chloride 10124-50-2,
Potassium arsenite 10137-74-3, Calcium chlorate 10192-29-7,
Ammonium chlorate 10241-05-1, Molybdenum pentachloride
10256-53-8, Methanamine, compd. with trinitromethane, miscellaneous
10294-33-4, Boron tribromide 10294-34-5, Boron trichloride

10306-83-9 10326-21-3, Magnesium chlorate 10326-24-6
 10361-95-2, Zinc chlorate 10377-60-3, Magnesium nitrate
 10377-66-9, Manganese nitrate 10415-75-5, Mercurous nitrate
 10421-48-4, Ferric nitrate 10431-47-7 10544-63-5, Ethyl
 crotonate 11069-19-5, Dichlorobutene 11071-47-9, Isooctene
 11099-22-2 11105-16-1, Zirconium hydride 11122-26-2 11135-81-2
 11138-49-1, Sodium aluminate 11140-68-4, Titanium hydride
 12001-29-5, Chrysotile 12002-19-6, Mercury nucleate 12002-48-1,
 Trichlorobenzene 12030-88-5, Potassium superoxide 12031-80-0,
 Lithium peroxide 12033-49-7, Nitrogen trioxide 12034-12-7,
 Sodium superoxide 12057-74-8, Magnesium phosphide (Mg₃P₂)
 12125-01-8, Ammonium fluoride 12135-76-1, Ammonium sulfide
 12136-15-1, Mercury nitride 12164-94-2, Ammonium azide
 12167-20-3, Nitrocresol 12172-67-7, Actinolite 12401-70-6,
 Potassium monoxide 12401-86-4, Sodium monoxide 12427-38-2, Maneb
 12440-42-5, Tin phosphide (Sn₃P₄) 12504-16-4, Strontium phosphide
 (Sr₃P₂) 12627-52-0, Antimony sulfide 12627-52-0D, Antimony
 sulfide, mixt. with chlorates 12640-89-0, Selenium oxide
 12653-71-3, Mercury oxide 12737-18-7, Calcium silicide
 12751-03-0, Cordite 12771-08-3, Sulfur chloride 12789-46-7, Amyl
 acid phosphate 13092-75-6, Silver acetylde 13138-45-9
 13225-10-0, .alpha.-**Methylglucoside** tetranitrate
 13319-75-0, Boron trifluoride dihydrate 13410-01-0, Sodium
 selenate 13424-46-9, Lead azide 13426-91-0, Cupriethylenediamine
 13437-80-4, Mercuric arsenate 13444-85-4, Nitrogen triiodide
 13446-10-1, Ammonium permanganate 13446-48-5, Ammonium nitrite
 13450-97-0, Strontium perchlorate 13453-30-0, Thallium chlorate
 13463-39-3, Nickel carbonyl 13463-40-6, Iron pentacarbonyl
 13464-33-0, Zinc arsenate 13464-58-9D, Arsenous acid, copper
 complexes 13465-73-1, Bromosilane 13465-95-7, Barium perchlorate
 13472-08-7 13473-90-0, Aluminum nitrate 13477-00-4, Barium
 chlorate 13477-10-6, Barium hypochlorite 13477-36-6, Calcium
 perchlorate 13520-83-7, Uranyl nitrate hexahydrate 13537-32-1,
 Fluorophosphoric acid 13548-38-4, Chromium nitrate 13597-54-1,
 Zinc selenate 13597-99-4, Beryllium nitrate 13598-36-2,
 Phosphonic acid 13637-63-3, Chlorine pentafluoride 13637-76-8,
 Lead perchlorate 13718-59-7 13746-89-9, Zirconium nitrate
 13762-51-1, Potassium borohydride 13766-44-4, Mercury sulfate
 13769-43-2, Potassium metavanadate 13770-96-2, Sodium aluminum
 hydride 13774-25-9 13779-41-4, Difluorophosphoric acid
 13780-03-5, Calcium bisulfite
 (packaging and transport of, stds. for)
 IT 13823-29-5, Thorium nitrate 13840-33-0, Lithium hypochlorite
 13840-33-0D, Lithium hypochlorite, mixts. 13843-59-9, Ammonium
 bromate 13863-88-2, Silver azide 13967-90-3, Barium bromate
 13973-87-0, Bromine azide 13973-88-1, Chlorine azide 13987-01-4,
 Tripropylene 14014-86-9 14019-91-1, Calcium selenate
 14293-73-3 14448-38-5, Hyponitrous acid 14519-07-4, Zinc bromate

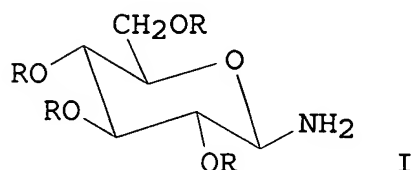
14519-17-6, Magnesium bromate 14546-44-2, Hydrazine azide
14567-73-8, Tremolite 14644-61-2, Zirconium sulfate 14666-78-5,
Diethylperoxydicarbonate 14674-72-7, Calcium chlorite
14696-82-3, Iodine azide (I(N₃)) 14977-61-8 15195-06-9
15245-44-0, Lead trinitroresorcinat 15347-57-6, Lead acetate
15457-98-4 15512-36-4, Calcium dithionite 15545-97-8,
2,2'-Azodi(2,4-dimethyl-4-methoxyvaleronitile) 15598-34-2,
Pyridine perchlorate 15718-71-5, Ethylenediamine diperchlorate
15825-70-4, Mannitol hexanitrate 15875-44-2, Methylamine
perchlorate 16215-49-9, Di-n-butyl peroxydicarbonate 16229-43-9,
Vanadyl sulfate 16339-86-9 16646-35-8 16721-80-5, Sodium
hydrosulfide 16753-36-9, Copper acetylde 16853-85-3, Lithium
aluminum hydride 16871-71-9, Zinc fluorosilicate 16871-90-2,
Potassium fluorosilicate 16872-11-0 16893-85-9, Sodium
fluorosilicate 16901-76-1, Thallium nitrate 16919-19-0, Ammonium
fluorosilicate 16940-66-2, Sodium borohydride 16940-81-1,
Hexafluorophosphoric acid 16941-12-1, Chloroplatinic acid
16949-15-8, Lithium borohydride 16949-65-8, Magnesium
fluorosilicate 16961-83-4, Fluorosilicic acid 16962-07-5,
Aluminum borohydride 17014-71-0, Potassium peroxide 17068-78-9,
Anthophyllite 17462-58-7, sec-Butyl chloroformate 17639-93-9,
Methyl-2-chloropropionate 17702-41-9, Decaborane 17861-62-0
18130-44-4, Titanium sulfate 18414-36-3 18810-58-7, Barium azide
19159-68-3 19287-45-7, Diborane 19287-45-7D, Diborane, mixts.
19624-22-7, Pentaborane 20062-22-0 20236-55-9, Barium styphnate
20600-96-8 20816-12-0, Osmium tetroxide 20820-44-4 20859-73-8,
Aluminum phosphide 21351-79-1, Cesium hydroxide (Cs(OH))
21569-01-7 21723-86-4 21985-87-5, Pentanitroaniline
22128-62-7, Chloromethylchloroformate 22750-93-2, Ethyl
perchlorate 22751-24-2 22826-61-5 23414-72-4, Zinc
permanganate 23745-86-0, Potassium fluoroacetate 24167-76-8,
Sodium phosphide 24468-13-1, 2-Ethylhexylchloroformate
24884-69-3 25013-15-4, Vinyl toluene 25109-57-3 25134-21-8
25136-55-4, Dimethyldioxane 25154-42-1, Chlorobutane 25154-54-5,
Dinitrobenzene 25155-15-1, Cymene 25167-20-8, Tetrabromoethane
25167-67-3, Butylene 25167-70-8, Diisobutylene 25167-80-0,
Chlorophenol 25168-05-2, Chlorotoluene 25265-68-3,
Methyltetrahydrofuran 25321-14-6, Dinitrotoluene 25322-01-4,
Nitropropane 25322-20-7, Tetrachloroethane 25323-30-2,
Dichloroethylene 25339-56-4, Heptene 25340-17-4, Diethylbenzene
25377-72-4, n-Amylene 25496-08-6, Fluorotoluene 25497-28-3,
Difluoroethane 25497-29-4, Chlorodifluoroethane 25513-64-8
25550-53-2 25550-55-4, Dinitrosobenzene 25550-58-7,
Dinitrophenol 25550-58-7D, Dinitrophenol, salts 25567-67-3,
Chlorodinitrobenzene 25567-68-4, Chloronitrotoluene 25639-42-3,
Methylcyclohexanol 25721-38-4, Lead picrate 25917-35-5, Hexanol
26134-62-3, Lithium nitride 26140-60-3D, Terphenyl, halo derivs.
26249-12-7, Dibromobenzene 26471-56-7, Dinitroaniline

26471-62-5, Toluene diisocyanate 26506-47-8, Copper chlorate
26571-79-9 26618-70-2 26628-22-8, Sodium azide 26638-19-7,
Dichloropropane 26645-10-3 26760-64-5, Isopentene 26762-93-6
26914-02-3, Iodopropane 26915-12-8, Toluidine 26952-23-8,
Dichloropropene 26952-42-1, Trinitroaniline 27134-26-5,
Chloroaniline 27134-27-6, Dichloroaniline 27137-85-5,
Dichlorophenyltrichlorosilane 27152-57-4 27176-87-0,
Dodecylbenzenesulfonic acid 27195-67-1, Dimethylcyclohexane
27215-10-7 27236-46-0, Isohexene 27254-36-0, Nitronaphthalene
27458-20-4, Butyltoluene 27978-54-7, Hydrazine perchlorate
27986-95-4 27987-06-0, Trifluoroethane 28260-61-9,
Trinitrochlorobenzene 28300-74-5, Antimony potassium tartrate
28324-52-9, Pinane hydroperoxide 28479-22-3 28653-16-9
28679-16-5, Trimethylhexamethylenediisocyanate 28805-86-9,
Butylphenol 29191-52-4, Anisidine 29306-57-8 29790-52-1,
Nicotine salicylate 29903-04-6 29965-97-7, Cyclooctadiene
30236-29-4, Sucrose octanitrate 30525-89-4, Paraformaldehyde
30553-04-9, Naphthylthiourea 30586-10-8, Dichloropentane
30586-18-6, Pentamethylheptane 31058-64-7 31212-28-9,
Nitrobenzenesulfonic acid 33453-96-2 33864-17-4 34216-34-7,
Trimethylcyclohexylamine 35296-72-1, Butanol 35860-50-5,
Trinitrobenzoic acid 35860-51-6, Dinitroresorcinol 35884-77-6,
Xylyl bromide 36472-34-1, Chloropropene 37020-93-2, Mercury
cyanide (Hg(CN)) 37187-22-7, Acetyl acetone peroxide 37206-20-5,
Methyl isobutyl ketone peroxide 37273-91-9, Metaldehyde
37320-91-5, Mercury iodide 37368-10-8, Aluminum vanadium oxide
38139-71-8, Bromide chloride 38232-63-2, Mercurous azide
38483-28-2, Methylene glycol dinitrate 39377-49-6,
Copper cyanide 39377-56-5, Lead sulfide 39404-03-0, Magnesium
silicide 39409-64-8, TVOPA 39432-81-0 39455-80-6, Ammonium
sodium vanadium oxide 40058-87-5, Isopropyl-2-chloropropionate
41195-19-1 41587-36-4, Chloronitroaniline 42296-74-2, Hexadiene
43133-95-5, Methylpentane 50815-73-1 50874-93-6 51006-59-8
51023-22-4, Trichlorobutene 51064-12-1 51312-23-3, Mercury
bromide 51317-24-9, Lead nitroresorcinolate 51325-42-9, Copper
selenite 51845-86-4, Ethyl borate 52181-51-8 53014-37-2,
Tetranitroaniline 53408-91-6, Mercury thiocyanate 53422-49-4
53569-62-3 53839-08-0 53906-68-6 54141-09-2, 1,4,-Butynediol
54413-15-9, Tritonal 54727-89-8 54958-71-3 55510-04-8,
Dinitroglycoluril 55810-17-8 56929-36-3 56960-91-9
57607-37-1, Octolite 58164-88-8, Antimony lactate 58499-37-9
58933-55-4 59753-21-8 59917-23-6 60168-33-4 60616-74-2,
Magnesium hydride 60869-68-3 60999-18-0 61061-91-4
61878-56-6 63085-06-3 63283-80-7, Dichloroisopropyl ether
63597-41-1, Octadiene 63885-01-8 63907-41-5 63937-14-4
63938-10-3, Chlorotetrafluoroethane 63988-31-8 64173-96-2
64973-06-4, Arsenic bromide

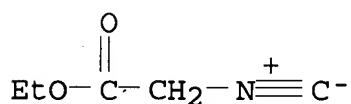
(packaging and transport of, stds. for)

L57 ANSWER 28 OF 38 HCA COPYRIGHT 2005 ACS on STN
 116:129454 O-alkyl-D-glucopyranosylamines and their
 derivatives. Goebel, Matthias; Ugi, Ivar (Org.-Chem. Inst., Tech.
 Univ. Muenchen, Garching, D-8046, Germany). Synthesis (12), 1095-8
 (English) 1991. CODEN: SYNTBF. ISSN: 0039-7881. OTHER SOURCES:
 CASREACT 116:129454.

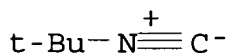
GI



- AB O-Alkyl-D-glucopyranosylamines, e.g., I (R = Me, Et, Me2CHCH2CH2), are prep'd. by alkylation of glucose and subsequent exchange of the 1-hydroxy group by an amino group. The title compds. are being tested as chiral templates, in particular for peptide syntheses by asym. four-component condensations.
- IT 2999-46-4, Ethyl 2-isocyanoacetate
 (condensation of, with tetraethylglucopyranosylamine, trifluoroacetylglycine, and isobutyraldehyde)
- RN 2999-46-4 HCA
- CN Acetic acid, isocyano-, ethyl ester (7CI, 8CI, 9CI) (CA INDEX NAME)

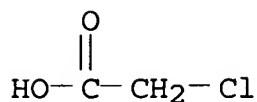


- IT 7188-38-7, tert-Butyl isocyanide
 (condensation of, with tetralkylglucopyranosylamines, isobutyraldehyde, and carboxylic acids)
- RN 7188-38-7 HCA
- CN Propane, 2-isocyano-2-methyl- (9CI) (CA INDEX NAME)



- IT 79-11-8, .alpha.-Chloroacetic acid, reactions
 (condensation of, with tetramethylglucopyranosylamine, isobutyraldehyde, and Bu isocyanide)
- RN 79-11-8 HCA

CN Acetic acid, chloro- (8CI, 9CI) (CA INDEX NAME)



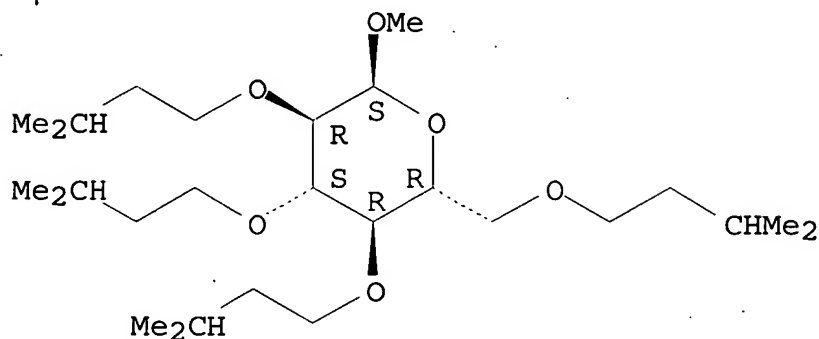
IT 139393-12-7P

(prepn. and sequential acetolysis and ammonolysis of)

RN 139393-12-7 HCA

CN .alpha.-D-Glucopyranoside, methyl 2,3,4,6-tetrakis-O-(3-methylbutyl)- (9CI) (CA INDEX NAME)

Absolute stereochemistry.



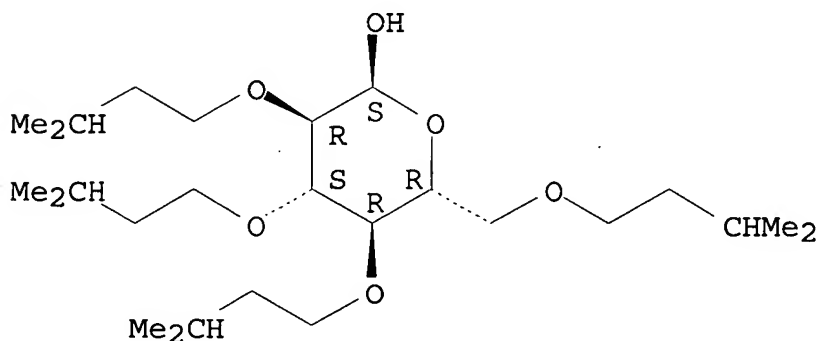
IT 139393-13-8P

(prepn. and sequential mesylation and ammonolysis of)

RN 139393-13-8 HCA

CN .alpha.-D-Glucopyranose, 2,3,4,6-tetrakis-O-(3-methylbutyl)- (9CI) (CA INDEX NAME)

Absolute stereochemistry.



CC 33-7 (Carbohydrates)

Section cross-reference(s): 34

- ST **alkylglucopyranosylamine; glucopyranosylamine**
alkyl; asym four component condensation
- IT Asymmetric synthesis and induction
(in condensation reaction of **tetraalkylglucopyranosylamines***
**** , isobutyraldehyde, isocyanides, and carboxylic acids**)
- IT *****Hexosamines**
(prepn. of, via sequential alkylation, mesylation, and amination
of glucose)
- IT Condensation reaction
(stereoselective, of **tetraalkylglucopyranosylamines,**
isobutyraldehyde, isocyanides, and carboxylic acids)
- IT 65-85-0, Benzoic acid, reactions
(condensation of, with **tetraalkylglucopyranosylamines,**
Bu isocyanide, and isobutyraldehyde)
- IT 78-84-2, Isobutyraldehyde
(condensation of, with **tetraalkylglucopyranosylamines,**
carboxylic acids, and isocyanides)
- IT 383-70-0, Trifluoroacetyl glycine
(condensation of, with **tetraalkylglucopyranosylamines,**
isobutyraldehyde, and alkyl isocyanides)
- IT 103-04-8
(condensation of, with **tetraethylglucopyranosylamine,**
isobutyraldehyde, and Bu isocyanide)
- IT 2999-46-4, Ethyl 2-isocyanoacetate
(condensation of, with **tetraethylglucopyranosylamine,**
trifluoroacetyl glycine, and isobutyraldehyde)
- IT 7188-38-7, tert-Butyl isocyanide
(condensation of, with **tetraalkylglucopyranosylamines,**
isobutyraldehyde, and carboxylic acids)
- IT 79-11-8, .alpha.-Chloroacetic acid, reactions 4702-13-0
(condensation of, with **tetramethylglucopyranosylamine,**
isobutyraldehyde, and Bu isocyanide)
- IT 139393-08-1P 139393-12-7P
(prepn. and sequential acetolysis and ammonolysis of)
- IT 139393-09-2P 139393-13-8P
(prepn. and sequential mesylation and ammonolysis of)

L57 ANSWER 29 OF 38 HCA COPYRIGHT 2005 ACS on STN

- 102:132420 Substituted pentahydroxyhexylammonium salts, a fungicide
containing them and control of fungi. Kropp, Rudolf; Fischer,
Martin; Ammermann, Eberhard; Pommer, Ernst Heinrich (BASF A.-G. ,
Fed. Rep. Ger.). Ger. Offen. DE 3308461 A1 19840913, 19 pp.
(German). CODEN: GWXXBX. APPLICATION: DE 1983-3308461 19830310.
- AB HOCH2(CHOH)4CH2N+R1R2R3 X- (I, R1, R2, R3 = same or different C2-4
alkoxycarbonyl, C1-20 substituted alkyl, C3-6 cycloalkyl, C7-15
haloaralkyl, substituted aryl, X = acid residue), useful as
fungicides, were prepd. Thus, N-ethyl-N-dodecyl-D-glucamine 19 in

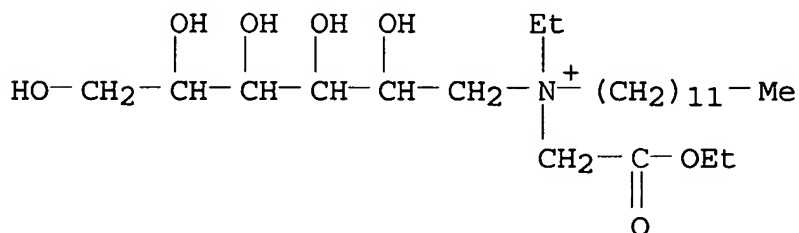
EtOH 100 contg. EtBr 5.5 parts were heated in autoclave 10 h at 10.degree. to give 82% I (R1 = R2 = Et, R3 = dodecyl, X = Br), which controlled Botrytis cinerea in red peppers 90% at 0.05 wt.% in an inert spray.

IT 95260-14-3P

(prepn. and fungicidal activity of)

RN 95260-14-3 HCA

CN D-Glucitol, 1-deoxy-1-[dodecyl(2-ethoxy-2-oxoethyl)ethylammonio]-, chloride (9CI) (CA INDEX NAME)



● Cl⁻

IC C07C091-26; A01N033-04

CC 33-6 (Carbohydrates)

Section cross-reference(s): 5

IT 65316-87-2P 73458-63-6P 73458-67-0P 73458-68-1P 75869-91-9P
 95260-08-5P 95260-09-6P 95260-10-9P 95260-11-0P 95260-12-1P
 95260-13-2P 95260-14-3P 95260-15-4P 95260-16-5P
 95342-28-2P 95342-29-3P

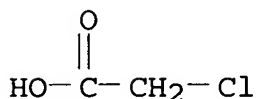
(prepn. and fungicidal activity of)

L57 ANSWER 30 OF 38 HCA COPYRIGHT 2005 ACS on STN

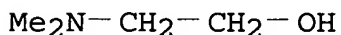
97:57523 Strontium- and barium-containing alkoxylation systems for unsaturated alcohols. Yang, Kang; Nield, Gerald Lee; Washecheck, Paul Howard (Conoco, Inc., USA). Eur. Pat. Appl. EP 49358 A1 19820414, 37 pp. DESIGNATED STATES: R: BE, DE, FR, GB, SE. (English). CODEN: EPXXDW. APPLICATION: EP 1981-106687 19810827. PRIORITY: US 1980-193780 19801003.

AB Unsaturated alcohols, such as oleyl alc. [143-28-2] are alkoxyated with oxirane [75-21-8] or methyloxirane [75-56-9] at 90-260.degree. in the presence of an oxide, hydroxide, or hydride of Ba or Sr and a catalyst promoter comprising a carboxylic acid, hydroxy compound, aldehyde, ketone, amide, amine, or mercaptan. The alkoxyates have peaked distributions and low pour points and contain low concns. of unreacted starting materials. Thus, a reactor (600 mL) containing oleyl alc. 120, Ba(OH)₂.H₂O 0.2, and nonylphenol [25154-52-3] 0.2 g was pressurized at 175.degree./40 psig with oxirane for 280 min while

97.6 g oxirane reacted to give ethoxylated oleyl alc.
 IT 79-11-8, uses and miscellaneous 108-01-0
 (catalysts, for alkoxylation of unsatd. alcs.)
 RN 79-11-8 HCA
 CN Acetic acid, chloro- (8CI, 9CI) (CA INDEX NAME)



RN 108-01-0 HCA
 CN Ethanol, 2-(dimethylamino)- (8CI, 9CI) (CA INDEX NAME)



IC C07C043-178; C07B029-00; C08G065-28; B01J023-02; C07C041-03
 CC 46-3 (Surface Active Agents and Detergents)
 Section cross-reference(s): 23, 27
 IT Alcohols, uses and miscellaneous
 Aldehydes, uses and miscellaneous
 Amides, uses and miscellaneous
 Amines, uses and miscellaneous
 Carboxylic acids, uses and miscellaneous
 Fatty acids, uses and miscellaneous
Glycols, uses and miscellaneous
 Ketones, uses and miscellaneous
 Phenols, uses and miscellaneous
 Thiols, uses and miscellaneous
 (catalysts, for alkoxylation of unsatd. alcs.)
 IT 50-21-5, uses and miscellaneous 50-70-4, uses and miscellaneous
 50-78-2 50-81-7, uses and miscellaneous 55-21-0 56-40-6, uses
 and miscellaneous 56-81-5, uses and miscellaneous 57-10-3, uses
 and miscellaneous 57-11-4, uses and miscellaneous 57-55-6, uses
 and miscellaneous 62-23-7 62-53-3, uses and miscellaneous
 64-18-6, uses and miscellaneous 64-19-7, uses and miscellaneous
 65-45-2 65-49-6 65-85-0, uses and miscellaneous 66-77-3
 68-12-2, uses and miscellaneous 69-65-8 69-72-7, uses and
 miscellaneous 75-64-9, uses and miscellaneous 75-89-8 75-98-9
 76-03-9, uses and miscellaneous 76-22-2 76-84-6 77-85-0
 77-92-9, uses and miscellaneous 77-99-6 78-24-0 78-96-6
 79-06-1, uses and miscellaneous 79-07-2 79-09-4, uses and
 miscellaneous 79-10-7, uses and miscellaneous 79-11-8,
 uses and miscellaneous 79-14-1, uses and miscellaneous 79-41-4,
 uses and miscellaneous 85-41-6 86-55-5 87-60-5 87-69-4, uses
 and miscellaneous 88-74-4 89-63-4 89-98-5 90-02-8, uses and
 miscellaneous 90-30-2 90-64-2 91-66-7 91-67-8 93-02-7

93-68-5 93-76-5 94-09-7 94-68-8 94-75-7, uses and
miscellaneous 94-96-2 95-51-2 95-53-4, uses and miscellaneous
95-54-5, uses and miscellaneous 95-55-6 95-68-1 95-74-9
95-76-1 95-80-7 95-82-9 95-85-2 97-02-9 97-65-4, uses and
miscellaneous 98-86-2, uses and miscellaneous 99-96-7, uses and
miscellaneous 100-01-6, uses and miscellaneous 100-37-8
100-46-9, uses and miscellaneous 100-52-7, uses and miscellaneous
100-61-8, uses and miscellaneous 100-97-0, uses and miscellaneous
101-77-9 101-83-7 102-01-2 102-71-6, uses and miscellaneous
102-82-9 103-69-5 103-82-2, uses and miscellaneous 103-83-3
103-84-4 103-90-2 104-55-2 104-88-1, uses and miscellaneous
104-94-9 105-08-8 106-47-8, uses and miscellaneous 106-49-0,
uses and miscellaneous 106-50-3, uses and miscellaneous 106-68-3
107-07-3, uses and miscellaneous 107-15-3, uses and miscellaneous
107-21-1, uses and miscellaneous 107-41-5 107-45-9 107-88-0
107-92-6, uses and miscellaneous 108-01-0 108-42-9
108-45-2, uses and miscellaneous 108-47-4 108-83-8 108-91-8,
uses and miscellaneous 108-95-2, uses and miscellaneous
109-52-4, uses and miscellaneous 109-86-4 110-16-7, uses and
miscellaneous 110-17-8, uses and miscellaneous 110-26-9
110-63-4, uses and miscellaneous 110-73-6 110-80-5 110-85-0,
uses and miscellaneous 110-97-4 111-14-8 111-20-6, uses and
miscellaneous 111-40-0 111-42-2, uses and miscellaneous
111-46-6, uses and miscellaneous 111-76-2 111-77-3 111-88-6
111-90-0 111-92-2 112-05-0 112-12-9 112-27-6 112-31-2
112-34-5 112-38-9 112-47-0 112-54-9 112-55-0 112-60-7
112-80-1, uses and miscellaneous 115-20-8 115-70-8 115-77-5,
uses and miscellaneous 118-44-5 118-91-2 118-92-3 119-67-5
121-69-7, uses and miscellaneous 122-20-3 122-39-4, uses and
miscellaneous 122-78-1 123-08-0 123-11-5, uses and
miscellaneous 123-30-8 123-54-6, uses and miscellaneous
123-99-9, uses and miscellaneous 124-04-9, uses and miscellaneous
124-13-0 124-22-1 124-26-5 124-30-1 126-30-7 126-58-9
127-19-5 134-20-3 139-13-9 141-22-0 141-43-5, uses and
miscellaneous 141-97-9 143-07-7, uses and miscellaneous
143-27-1 144-62-7, uses and miscellaneous 149-32-6 149-57-5
150-13-0 471-46-5 514-10-3 528-44-9 541-50-4, uses and
miscellaneous 544-63-8, uses and miscellaneous 556-18-3
598-38-9 603-34-9 608-66-2 610-15-1 612-14-6 619-56-7
619-57-8 619-66-9 621-82-9, uses and miscellaneous 623-27-8
625-48-9 629-01-6 629-11-8 629-54-9 638-58-4 1120-16-7
1304-28-5, uses and miscellaneous 1314-11-0, uses and
miscellaneous 1561-86-0 2016-42-4 2016-57-1 2319-29-1
2680-03-7 2835-68-9 2885-00-9 3007-31-6 3424-93-9
3724-65-0 4767-03-7 6915-15-7 7440-24-6, uses and
miscellaneous 7440-39-3, uses and miscellaneous 13477-09-3
13598-33-9 17194-00-2 17849-38-6 18480-07-4 25103-58-6
25154-52-3 25265-71-8 26266-59-1 26545-51-7 28132-01-6

82073-98-1 82580-43-6

L57 ANSWER 31 OF 38 HCA COPYRIGHT 2005 ACS on STN

AB The surface-active properties of quaternary ammonium salts of D-sorbitol, e.g., $[QNMeRR_1]^+X^-$ (Q = radical from D-sorbitol, R = Et, Pr, octyl, nonyl, decyl, $CH_2CO_2C_6H_{13}$, $CH_2CO_2C_{10}H_{21}$, CH_2CO_2Me , R_1 = dodecyl, hexadecyl, octadecyl, X^- = Br, Cl) and $[QMeRNCH_2]^{2+}2Br^-$ (R = dodecyl, hexadecyl), depend on the structure of the substituents connected to the N atom. A correspondence between the surface-active and bactericidal properties was also found.

73458-88-5

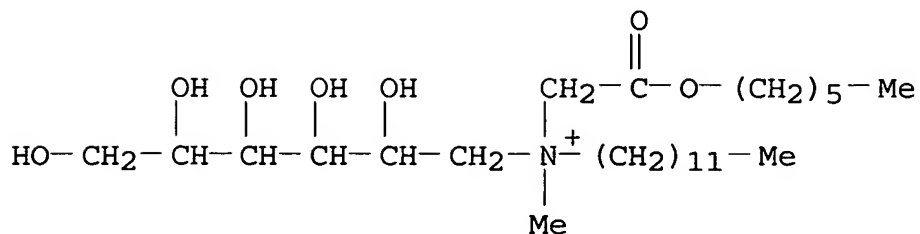
RN 54261-91-5 HCA

$$\begin{array}{c} \text{HO}-\text{CH}_2-\text{CH}(\text{OH})-\text{CH}(\text{OH})-\text{CH}(\text{OH})-\text{CH}(\text{OH})-\text{CH}_2-\text{N}^+(\text{Me})\left\{ \begin{array}{l} \text{CH}_2-\overset{\text{O}}{\parallel}{\text{C}}-\text{O}-(\text{CH}_2)_9-\text{Me} \\ (\text{CH}_2)_{11}-\text{Me} \end{array} \right. \end{array}$$

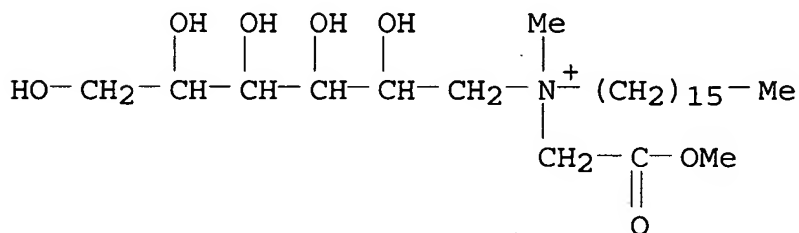
- Cl^-

RN 73458-70-5 HCA

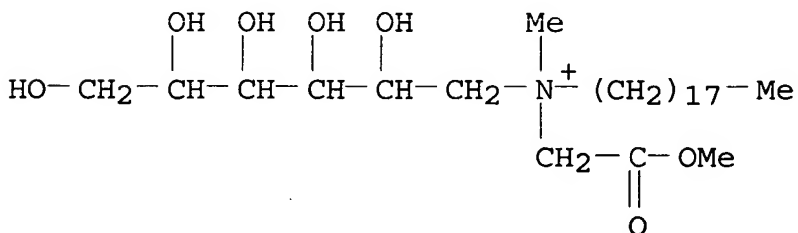
CN D-Glucitol, 1-deoxy-1-[dodecyl[2-(hexyloxy)-2-oxoethyl]methylammonio]-, chloride (9CI) (CA INDEX NAME)

● Cl⁻

RN 73458-84-1 HCA

CN D-Glucitol, 1-deoxy-1-[hexadecyl(2-methoxy-2-oxoethyl)methylammonio] -
, chloride (9CI) (CA INDEX NAME)● Cl⁻

RN 73458-88-5 HCA

CN D-Glucitol, 1-deoxy-1-[(2-methoxy-2-oxoethyl)methyloctadecylammonio] -
, chloride (9CI) (CA INDEX NAME)● Cl⁻

CC 33-5 (Carbohydrates)

Section cross-reference(s): 1

IT 54261-91-5 73458-66-9 73458-67-0 73458-70-5
73458-79-4 73458-80-7 73458-82-9 73458-84-1
73458-86-3 73458-88-5 75869-90-8 75869-91-9
75883-17-9

(surface-active properties of, bactericidal activity in relation to)

L57 ANSWER 32 OF 38 HCA COPYRIGHT 2005 ACS on STN

93:200512 Molecular properties, partial purification, and assay by incubation period measurements of the hamster scrapie agent. Prusiner, Stanley B.; Groth, Darlene F.; Cochran, S. Patricia; Masiarz, Frank R.; McKinley, Michael P.; Martinez, Hugo M. (Dep. Neurol., Univ. California, San Francisco, CA, 94143, USA). Biochemistry, 19(21), 4883-91 (English) 1980. CODEN: BICHAW. ISSN: 0006-2960.

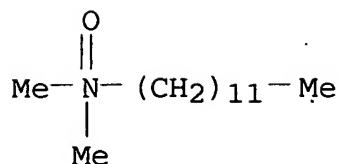
AB The scrapie agent causes a progressive degeneration of the central nervous system of animals after a prolonged incubation period. Measurements of incubation-period length, defined as the time from inoculation to the onset of clin. signs of neurol. dysfunction, were related to the agent and the diln. of the inoculated sample. Equations defining the relation provide a new assay for the agent requiring fewer animals than endpoint titrns. By use of this incubation-period assay, the scrapie agent from hamster brain was found to have an S_{20,W} of <300 S but >30 S assuming $\rho = 1.2 \text{ g/cm}^3$. A partially purified fraction P3 was obtained by differential centrifugation and Na deoxycholate extn. When P3 was extd. with PhOH, virtually no infectivity was found in the aq. phase even after examg. such variables as pH, salt concn., and predigestion of samples with proteinase K. Nonionic and nondenaturing anionic detergents did not inactivate the scrapie agent; in contrast, denaturing detergents inactivated the agent. SDS inactivated >90% of the agent at an SDS/protein ratio of 1.8. Inactivation by SDS appears to be a cooperative process. Addn. of a nonionic detergent to form mixed micelles with SDS prevented inactivation of the agent by SDS. Weak chaotropic ions do not inactivate the scrapie agent whereas strong chaotropic ions such as SCN⁻ and Cl₃CCOO⁻ destroy infectivity at concns. of 0.2M. These data provide evidence in support of a protein component within the scrapie agent which is essential for maintenance of infectivity. Thus, it is unlikely that the scrapie agent is composed only of a naked nucleic acid as is the case for the plant viroids.

IT 1643-20-5 29836-26-8

(scrapie agent stability in presence of)

RN 1643-20-5 HCA

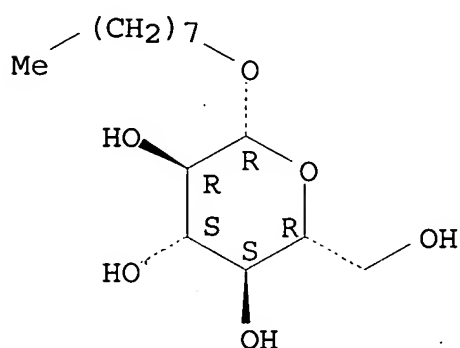
CN 1-Dodecanamine, N,N-dimethyl-, N-oxide (9CI) (CA INDEX NAME)



RN 29836-26-8 HCA

CN .beta.-D-Glucopyranoside, octyl (9CI) (CA INDEX NAME)

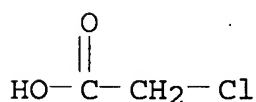
Absolute stereochemistry. Rotation (-).



IT 79-11-8, biological studies
(scrapie agents activity in presence of)

RN 79-11-8 HCA

CN Acetic acid, chloro- (8CI, 9CI) (CA INDEX NAME)



CC 9-13 (Biochemical Methods)
Section cross-reference(s): 10, 14

IT **Betaines**
(sulfo-, scrapie agent stability in presence of)

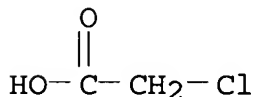
IT 57-09-0 302-95-4 361-09-1 1643-20-5 9002-92-0
9002-93-1 9004-95-9 9036-19-5 29836-26-8

(scrapie agent stability in presence of)

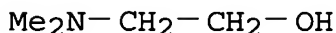
IT 64-19-7, biological studies 76-03-9, biological studies
79-11-8, biological studies 79-43-6, biological studies
302-04-5, biological studies 16887-00-6, biological studies
24959-67-9, biological studies
(scrapie agents activity in presence of)

L57 ANSWER 33 OF 38 HCA COPYRIGHT 2005 ACS on STN

- 92:202965 Testing of biodegradability in the batch experiment - further experiences and new applicabilities. Zahn, Richard; Wellens, Heino (Hoechst A.-G., Frankfurt/Main, 6230/80, Fed. Rep. Ger.). Zeitschrift fuer Wasser- und Abwasser-Forschung, 13(1), 1-7 (German) 1980. CODEN: ZWABAQ. ISSN: 0044-3727.
- AB The Hoechst batch method of detg. biodegradability was studied using diethylene glycol [111-46-6] as ref. material. If the activated sludge concn. is kept const., the degrdn. time increases with using substance concns. Increasing activated sludge concns. with concomittant const. substance concns. results in decreasing degrdn. times. Above substance-dependent activated sludge concns. the degrdn. time does not change. The degree of degrdn., degrdn. fine, adaptation time and degrdn. rate of 50 substances were detd.
- IT 79-11-8, biological studies 108-01-0
(biodegradability of, in activated-sludge process, detn. of)
- RN 79-11-8 HCA
- CN Acetic acid, chloro- (8CI, 9CI) (CA INDEX NAME)



- RN 108-01-0 HCA
- CN Ethanol, 2-(dimethylamino)- (8CI, 9CI) (CA INDEX NAME)

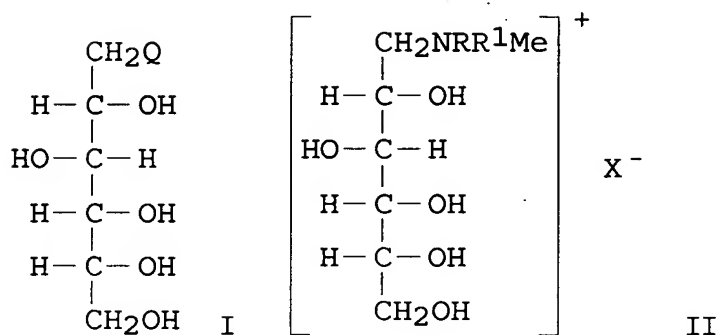


- CC 60-1 (Sewage and Wastes)
- IT 50-99-7, biological studies 62-53-3, biological studies 64-19-7, biological studies 69-72-7, biological studies 75-92-3 79-07-2 79-11-8, biological studies 85-47-2 88-99-3, biological studies 89-05-4 95-56-7 98-11-3, biological studies 99-05-8 99-94-5 100-46-9, biological studies 105-45-3 105-60-2, biological studies 108-01-0 109-73-9, biological studies 110-80-5 110-97-4 111-46-6, biological studies 111-90-0 111-92-2 112-07-2 121-44-8, analysis 124-04-9, biological studies 124-09-4, biological studies 124-17-4 126-30-7 141-05-9 142-84-7 520-45-6 535-80-8 554-84-7 624-48-6 872-50-4, biological studies 1510-16-3 4435-53-4 9002-89-5 9004-53-9 9005-25-8, biological studies 9043-30-5 11067-81-5 25322-68-3 26896-18-4 50855-13-5
(biodegradability of, in activated-sludge process, detn. of)

- L57 ANSWER 34 OF 38 HCA COPYRIGHT 2005 ACS on STN
- 92:181509 Synthesis of antimicrobial substances - derivatives of D-sorbitol. Veksler, V. I.; Deeva, V. E.; Kovalenko, L. N.;

Markovich, A. V.; Lysenko, E. A.; Sokolov, B. V.; Sokolov, V. D.; Solov'yan, N. A.; Khavin, Z. Ya.; et al. (Leningr. Inst. Sov. Trgovli, Leningrad, USSR). Zhurnal Obshchei Khimii, 49(12), 2731-8 (Russian) 1979. CODEN: ZOKHA4. ISSN: 0044-460X.

GI



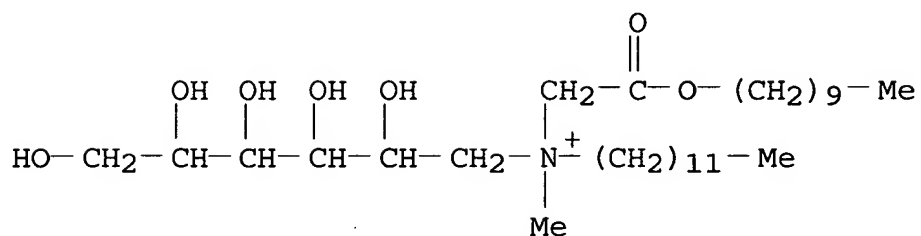
AB Alkylation of N-methyl-D-glucamine (I, Q = MeNH) with RX (R = C₁₈H₃₇, X = Br; R = C₁₂H₂₅, C₁₄H₂₉, C₁₆H₃₃, X = Cl) gave I (Q = MeNR) which were alkylated by R¹X [R¹ = C₁-6, 8-10 alkyl, PhCH₂, CH₂CO₂R² (R² = Me, hexyl, octyl, decyl), CH₂CONEt₂, X = I, Cl, Br, PhSO₃] to give quaternary ammonium salts II which were effective against gram-pos. bacteria and exhibited low toxicities in chick embryo tests.

IT 54261-91-5P 54261-92-6P 73458-69-2P
73458-70-5P 73458-71-6P 73458-84-1P
73458-88-5P

(prepn. and bactericidal activity of)

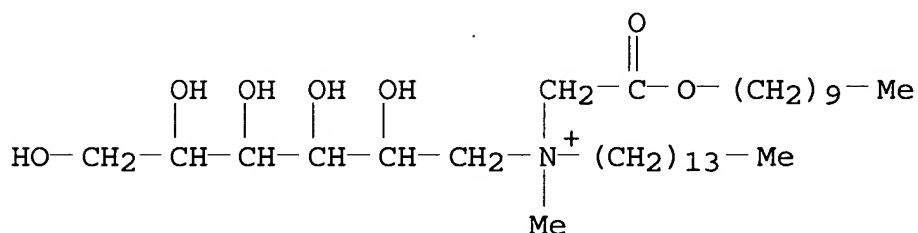
RN 54261-91-5 HCA

CN D-Glucitol, 1-[[2-(decyloxy)-2-oxoethyl]dodecylmethyammonio]-1-deoxy-, chloride (9CI) (CA INDEX NAME)

● Cl⁻

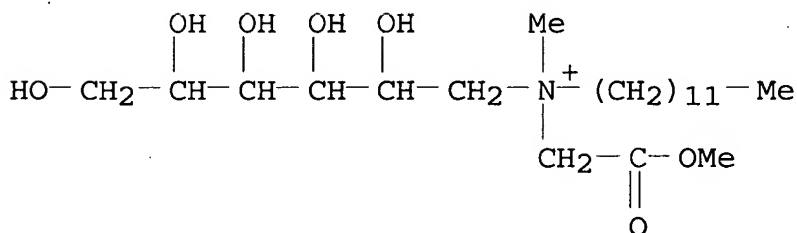
RN 54261-92-6 HCA

CN D-Glucitol, 1-[[2-(decyloxy)-2-oxoethyl]methyltetradecylammonio]-1-deoxy-, chloride (9CI) (CA INDEX NAME)

● Cl⁻

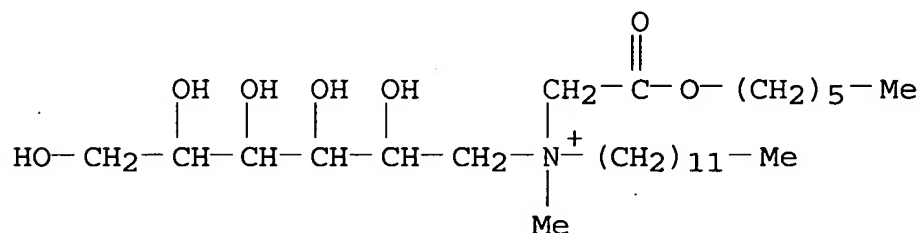
RN 73458-69-2 HCA

CN D-Glucitol, 1-deoxy-1-[dodecyl(2-methoxy-2-oxoethyl)methylammonio]-, chloride (9CI) (CA INDEX NAME)

● Cl⁻

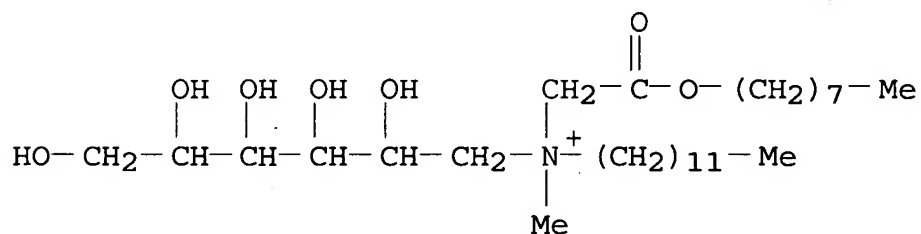
RN 73458-70-5 HCA

CN D-Glucitol, 1-deoxy-1-[dodecyl[2-(hexyloxy)-2-oxoethyl]methylammonio]-, chloride (9CI) (CA INDEX NAME)

● Cl⁻

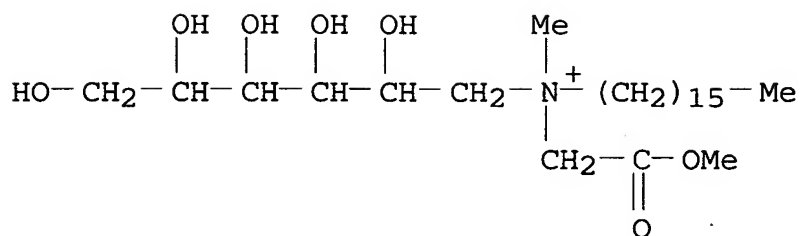
RN 73458-71-6 HCA

CN D-Glucitol, 1-deoxy-1-[dodecylmethyl[2-(octyloxy)-2-oxoethyl]ammonio]-, chloride (9CI) (CA INDEX NAME)

● Cl⁻

RN 73458-84-1 HCA

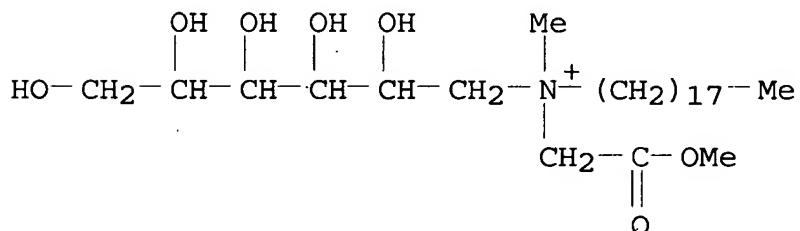
CN D-Glucitol, 1-deoxy-1-[hexadecyl(2-methoxy-2-oxoethyl)methylammonio]-, chloride (9CI) (CA INDEX NAME)



● Cl⁻

RN 73458-88-5 HCA

CN D-Glucitol, 1-deoxy-1-[(2-methoxy-2-oxoethyl)methyloctadecylammonio]-, chloride (9CI) (CA INDEX NAME)



● Cl⁻

CC 33-5 (Carbohydrates)

Section cross-reference(s): 1

IT **54261-91-5P 54261-92-6P** 73458-63-6P
 73458-64-7P 73458-65-8P 73458-66-9P 73458-67-0P 73458-68-1P
73458-69-2P 73458-70-5P 73458-71-6P
 73458-72-7P 73458-73-8P 73458-74-9P 73458-75-0P 73458-76-1P
 73458-78-3P 73458-79-4P 73458-80-7P 73458-81-8P 73458-82-9P
 73458-83-0P **73458-84-1P** 73458-85-2P 73458-86-3P
 73458-87-4P **73458-88-5P** 73458-89-6P 73458-90-9P
 73458-91-0P 73469-05-3P 73495-13-3P
 (prepn. and bactericidal activity of)

L57 ANSWER 35 OF 38 HCA COPYRIGHT 2005 ACS on STN

88:50261 Quaternary fatty acid haloalkanoate of dialkylaminopropylamides. Connor, Donald E.; Fogel, Arnold W. (Van Dyk and Co., Inc., USA). Ger. Offen. DE 2708823 19771103, 21 pp. (German). CODEN: GWXXBX. APPLICATION: DE 1977-2708823 19770301.

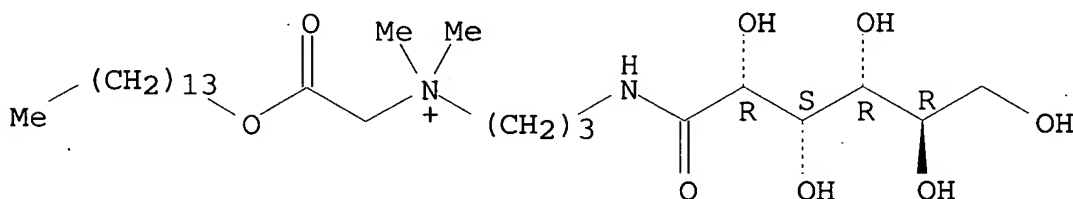
AB $\text{RCONH}(\text{CH}_2)_x\text{N}^+\text{R}_1\text{R}_2(\text{CH}_2)_y\text{CO}_2(\text{CH}_2)_z\text{Me}$ Cl⁻ (RCO = gluconoyl or C7-21 fatty acyl; R₁ = Me, Et; x = 2, 3; y = 1-3; z = 7-21), useful as fabric softeners and antistatic agents, were prep'd. Thus, gluconic acid lactone heated with Et₂N(CH₂)₃NH₂ and a small amt. KOH gave RCONH(CH₂)₃NEt₂ (R = gluconoyl), which was quaternized with ClCH₂CO₂(CH₂)₁₃Me.

IT **64120-17-8P 64120-18-9P 64120-19-0P**
(manuf. of, for textile treatment)

RN 64120-17-8 HCA

CN 1-Propanaminium, 3-(D-gluconoylamino)-N,N-dimethyl-N-[2-oxo-2-(tetradecyloxy)ethyl]-, chloride (9CI) (CA INDEX NAME)

Absolute stereochemistry.

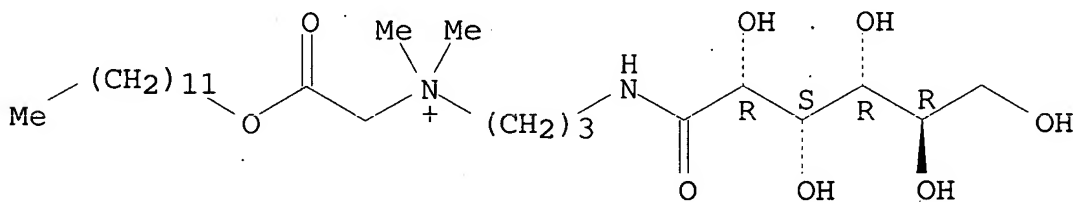


● Cl⁻

RN 64120-18-9 HCA

CN 1-Propanaminium, N-[2-(dodecyloxy)-2-oxoethyl]-1-(D-gluconoylamino)-N,N-dimethyl-, chloride (9CI) (CA INDEX NAME)

Absolute stereochemistry.

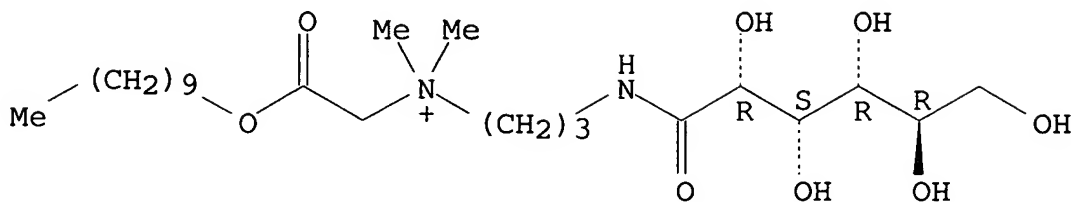


● Cl⁻

RN 64120-19-0 HCA

CN 1-Propanaminium, N-[2-(decyloxy)-2-oxoethyl]-3-(D-gluconoylamino)-N,N-dimethyl-, chloride (9CI) (CA INDEX NAME)

Absolute stereochemistry.



IC C07C103-44

CC 23-4 (Aliphatic Compounds)

Section cross-reference(s): 39

IT **64120-17-8P 64120-18-9P 64120-19-0P**
(manuf. of, for textile treatment)

L57 ANSWER 36 OF 38 HCA COPYRIGHT 2005 ACS on STN

87:141120 Fatty haloalkanoate quaternaries of dialkylaminopropylamides.
Conner, Donald E.; Fogel, Arnold W. (Van Dyk and Co., Inc., USA).
U.S. US 4038294 19770726, 5 pp. (English). CODEN: USXXAM.
APPLICATION: US 1976-676416 19760413.

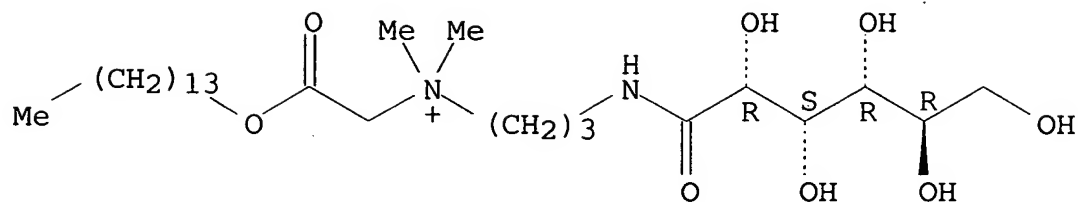
AB Synthetic emollients (e.g., for hair conditioners) described by the formula, [RCONH(CH₂)_xNR₁R₁(CH₂)_yCO₂R₂Me]⁺.cntdot.X⁻ (R = gluconic acid and C7-21 fatty acids; R₁ = Me, Et; x = 2-3; y = 1-3; R₂ = (CH₂)₇₋₂₁ or sorbate; X = halogen), are prepd. by heating the appropriate acid or acid-contg. oil with .gamma.-dimethylamino- or .gamma.-diethylaminopropylamine at .apprx.140-160.degree., in a N atm., using either NaOH, KOH, NaOMe, or NaOEt as catalyst. The resulting aminoamide is then quaternized by heating at 100-10.degree. with a fatty haloalkanoate ester, using propylene glycol as solvent. Thus, myristyl 3-chloropropionate of 3-dimethylaminopropyl mink oil fatty acid amide was prepd. by heating (at 110.degree. for 4 h) 170.3 g mink 3-dimethylaminopropylamide and 152 g myristyl 3-chloropropionate [64120-16-7] in 215 g propylene glycol. These emollients impart antitangle and antistatic properties to hair formulations.

IT **64120-17-8P 64120-18-9P 64120-19-0P**
(prepn. of, as hair conditioner)

RN 64120-17-8 HCA

CN 1-Propanaminium, 3-(D-gluconoylamino)-N,N-dimethyl-N-[2-oxo-2-(tetradecyloxy)ethyl]-, chloride (9CI) (CA INDEX NAME)

Absolute stereochemistry.

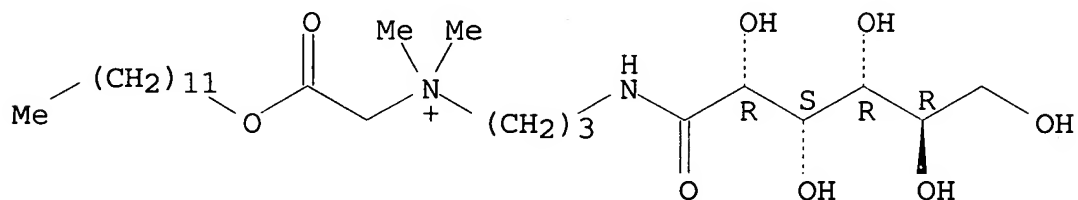


● Cl⁻

RN 64120-18-9 HCA

CN 1-Propanaminium, N-[2-(dodecyloxy)-2-oxoethyl]-1-(D-gluconoylamino)-N,N-dimethyl-, chloride (9CI) (CA INDEX NAME)

Absolute stereochemistry.

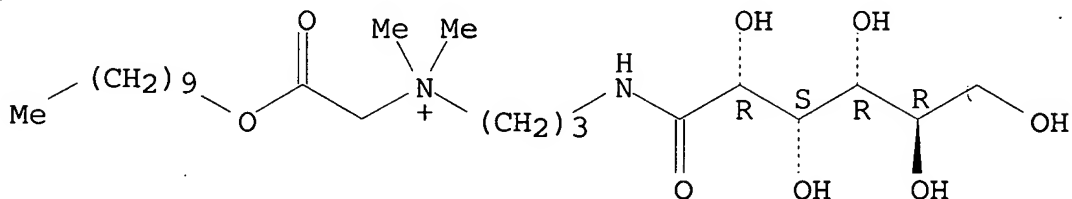


● Cl⁻

RN 64120-19-0 HCA

CN 1-Propanaminium, N-[2-(decyloxy)-2-oxoethyl]-3-(D-gluconoylamino)-N,N-dimethyl-, chloride (9CI) (CA INDEX NAME)

Absolute stereochemistry.



● Cl⁻

IC C09F005-00
 INCL 260404500
 CC 62-3 (Essential Oils and Cosmetics)
 IT 64120-17-8P 64120-18-9P 64120-19-0P
 (prepn. of, as hair conditioner)

L57 ANSWER 37 OF 38 HCA COPYRIGHT 2005 ACS on STN

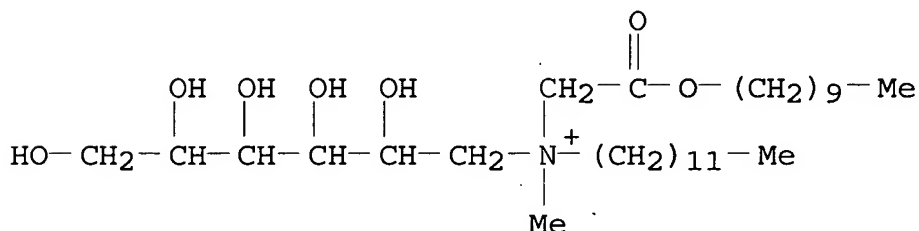
82:100590 D-Sorbitol derivatives as cationic surfactants. Veksler, V. I.; Markovich, A. V.; Khavin Z. Ya. (Leningr. Inst. Sov. Torg. im. Engelsa, Leningrad, USSR). Zhurnal Obshchei Khimii, 44(10), 2367-8 (Russian) 1974. CODEN: ZOKHA4. ISSN: 0044-460X.

AB Ammonium salts of general formula $\text{HOCH}_2(\text{CHOH})_4\text{CH}_2\text{N}^+\text{MeRR}_1\text{X}^-$ (I; R is dodecyl, tetrodecyl, or hexadecyl; R₁ is alkyl, $\text{CH}_2\text{CO}_2\text{C}_{10}\text{H}_{21}$, or $\text{CH}_2\text{CO}_2\text{C}_{12}\text{H}_{25}$; X⁻ is Cl⁻, Br⁻, or I⁻) have surfactant and antimicrobial properties. I are synthesized by reacting com. N-methyl-D-glucamine [6284-40-8] with RX; the products are then reacted with ClR₁. In this way 1-(N-methyl-N-dodecylamino)-1-deoxy-D-sorbitol (II) [54261-89-1] and 1-(N-methyl-N-tetradecylamino)-1-deoxy-D-sorbitol (III) [54261-90-4] are prepd. in 51 and 68% yields resp. Their quaternization gives 1-(N-methyl-N-dodecylamino)/1-deoxy-D-sorbitol decyloxycarbonylmethyl chloride salt [54261-91-5] (59%) and 1-(M-methyl-N-tetradecylamino)-1-deoxy-D-sorbitol decyloxycarbonylmethyl chloride salt [54261-92-6].

IT 54261-91-5 54261-92-6
 (surfactants)

RN 54261-91-5 HCA

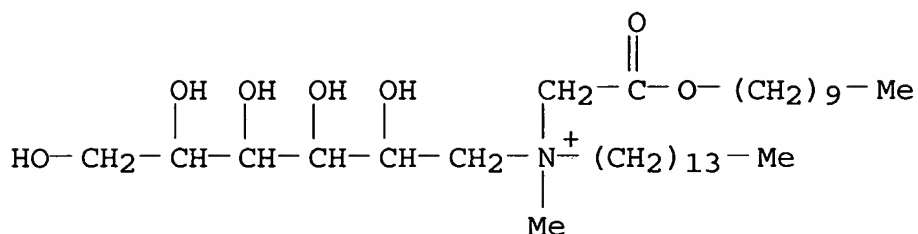
CN D-Glucitol, 1-[[2-(decyloxy)-2-oxoethyl]dodecylmethyllummonio]-1-deoxy-, chloride (9CI) (CA INDEX NAME)



● Cl⁻

RN 54261-92-6 HCA

CN D-Glucitol, 1-[[2-(decyloxy)-2-oxoethyl]methyllummonio]-1-deoxy-, chloride (9CI) (CA INDEX NAME)



● Cl⁻

CC 46-3 (Surface Active Agents and Detergents)

Section cross-reference(s): 33

IT 54261-89-1 54261-90-4 54261-91-5 54261-92-6
(surfactants)

L57 ANSWER 38 OF 38 HCA COPYRIGHT 2005 ACS on STN

45:3400 Original Reference No. 45:549a-i,550a-i,551a Synthetic curare compounds. IV. Aliphatic monoesters and diesters of .omega.-amino acids having a double quaternary ammonium function. Fusco, R.; Palazzo, G.; Chiavarelli, S.; Bovet, D. (Ist. superiore sanita, Rome). Gazzetta Chimica Italiana, 79, 836-48 (Unavailable) 1949. CODEN: GCITA9. ISSN: 0016-5603.

AB cf. C.A. 44, 1031e. The aim was to det. what effect on the pharmacol. properties of IR3NCH2CH2OCO(CH2)xCO2CH2CH2NR3I compds. would result from a different arrangement of the ester groups or the presence of only 1 such group. To this end, a new series of compds. of 2 types were prepd., viz., monoesters of the XMe3N(CH2)nCO2(CH2)nMeX type, formed from choline and an aliphatic betaine, and diesters of the XMe3N(CH2)nCO2(CH2)nOCO(CH2)nNMe3X type from aliphatic betaines and an .alpha.,.omega.-dihydroxyparaffinic compd. **Glycol**, added to cold excess ClCH2COCl in anhyd. C6H6, heated 3 hrs. on a steam bath, and distd. in vacuo, yields 100% of **glycol** chloroacetate (I), b8 156-8.degree., m. 43-4.degree., prepd. otherwise by Meerwein and Sonke (C.A. 27, 4215). I and an excess of a 12% soln. of Me2NH in C6H6, allowed to stand overnight, concd. aq. K2CO3 added, the C6H6 layer dried by K2CO3, and the Me2NH2 distd. in vacuo, gives **glycol** dimethylaminoacetate, [Me2NCH2CO2CH2]2 (II), b2 136.degree.. With MeI in cold Me2CO, II gives, after purification of the product by EtOH, 100% of the dimethiodide, [IMe3NCH2CO2CH2]2 (III), m. 182.degree.. I (10 g.), treated with excess Et2NH (heat is evolved), heated to complete the reaction, the product dissolved in water, concd. K2CO3 added, the mixt. extd. with Et2O, the ext. dried, and the Et2O and Et2NH eliminated by suction, yields 7 g.

glycol diethylaminoacetate, $[\text{Et}_2\text{NCH}_2\text{CO}_2\text{CH}_2]_2$ (IV), b2-3 150.degree.. IV (4 g.) and 7.5 g. EtI, refluxed 16-18 hrs., and the product purified by EtOH, yield the diethiodide (V), m. 173.degree.. $\text{BrCH}_2\text{CH}_2\text{COCl}$ (VI) was prepd. from SOCl_2 and $\text{BrCH}_2\text{CH}_2\text{CO}_2\text{H}$ (VII); 20 g. VII gave 21 g. VI. This yield is higher than by the method of Hamilton and Simpson (C.A. 23, 5470). $(\text{CH}_2\text{OH})_2$ (6.2 g.), added dropwise to 38 g. cold VI, allowed to stand overnight, and fractionally distd. in vacuo, yields 19.5 g. of a compd. which is probably 2-hydroxyethyl .beta.-bromopropionate (VIII). It could not be obtained pure, but with Me_2NH in C_6H_6 it forms a compd., b3-4 85.8.degree., corresponding to $\text{Me}_2\text{NCH}_2\text{CH}_2\text{CO}_2\text{CH}_2\text{CH}_2\text{OH}$, which in turn with MeI gives the compd. $\text{IMe}_3\text{NCH}_2\text{CH}_2\text{CO}_2\text{CH}_2\text{CH}_2\text{OH}$, b3-4 85-8.degree.. When the temp. of the distn. in vacuo is raised above that at which VIII distils, 10 g. $[\text{BrCH}_2\text{CH}_2\text{CO}_2\text{CH}_2]_2$ (IX) is obtained. IX (9.2 g.) and 5 cc. of a 15% soln. of Me_2NH in C_6H_6 , heated in a sealed tube 2 hrs. at 60.degree., water and K_2CO_3 added, the mixt. extd. with C_6H_6 , the ext. dried, evapd., and the residue distd. in vacuo, yield 4.5 g. **glycol** .beta.-dimethylaminopropionate, $[\text{Me}_2\text{NCH}_2\text{CH}_2\text{CO}_2\text{CH}_2]_2$, b4 150.degree., b2-3 142.degree., b3 145.degree.. $(\text{CH}_2)_4(\text{OH})_2$ (30 g.), added dropwise to 75 g. ClCH_2COCl , heated several hrs. at 80-100.degree. (until HCl is no longer evolved), allowed to stand until solidified, dissolved in hot C_6H_6 with animal charcoal, allowed to crystallize, and purified by ligroin, gives a high yield of 1,4-butylene **glycol** chloroacetate, $[\text{ClCH}_2\text{CO}_2\text{CH}_2\text{CH}_2]_2$ (X), m. 76-7.degree.. X (10 g.) and 70 g. of a 14% C_6H_6 soln. of Me_2NH , heated overnight at 80.degree., aq. Na_2CO_3 added, and the C_6H_6 layer dried and distd. in vacuo, yield 6 g. 1,4-butylene **glycol** dimethylaminoacetate, b4 156.degree.. With excess MeI in MeOH or Me_2CO , it gives 100% of the dimethiodide (XI), m. 200.degree., and with EtI in anhyd. EtOH (refluxing 2 hrs.) the diethiodide (XII), m. 141.degree.. $(\text{CH}_2)_4(\text{OH})_2$ added dropwise to excess VI, heated 2 hrs. at 80-100.degree., allowed to stand overnight, and distd. in vacuo, gives a high yield of butylene **glycol** .beta.-bromopropionate (XIII), b2 187.degree.. XIII and Me_2NH in C_6H_6 , heated 4 hrs. in a sealed tube at 75.degree., aq. Na_2CO_3 added, and the C_6H_6 layer dried and distd. in vacuo, yield butylene **glycol** .beta.-dimethylaminopropionate, b1-2 160.degree.; dimethiodide (XIV), m. 170.degree.. p- $\text{C}_6\text{H}_4(\text{OCOCH}_2\text{I})_2$ and excess Me_3N in C_6H_6 , allowed to stand 24 hrs., and the ppt. purified by anhyd. EtOH, yield hydroquinone dimethylaminoacetate-2MeI, p- $\text{C}_6\text{H}_4(\text{OCOCH}_2\text{NMe}_3\text{I})_2$ (XV), m. 178.degree.. VI (20 g.) and 5.5 g. hydroquinone, heated on a steam bath until HCl is no longer evolved, cooled until solid, the excess IV decompd. by hot water, and the product purified by EtOH, yield hydroquinone .beta.-bromopropionate (XVI), m. 119.degree.. XVI (2.6 g.) in 100 cc. C_6H_6 and 10 g. 17% C_6H_6 soln. of Me_3N , allowed to stand 24 hrs., and the ppt. purified by EtOH, yield hydroquinone .beta.-dimethylaminopropionate-2MeBr

(XVII), m. 146.degree.. $\text{ClCH}_2\text{CO}_2\text{CH}_2\text{CH}_2\text{Cl}$ (15.5 g.) and 150 g. of a 12% C_6H_6 soln. of Me_2NH , allowed to stand 24 hrs., filtered, and the filtrate fractionally distd. in vacuo, yield 12.5 g. 2-dimethylaminoethyl dimethylaminoacetate, $\text{Me}_2\text{NCH}_2\text{CO}_2\text{CH}_2\text{CH}_2\text{NMe}_2$, b2 63.degree.. With excess MeI in Me_2CO , it forms the dimethiodide (XVIII), m. 229.degree.. $\text{ClCH}_2\text{CH}_2\text{OH}$ (5.2 g.), added dropwise to 12.5 g. VI (the reaction is energetic), and the mixt. heated 5 hrs. at 120.degree. (until HCl is no longer evolved), and fractionally distd. in vacuo, gives a high yield of 2-chloroethyl .beta.-bromopropionate, $\text{BrCH}_2\text{CH}_2\text{CO}_2\text{CH}_2\text{CH}_2\text{Cl}$ (XIX), b5 100-3.degree.. XIX and excess Me_2NH in C_6H_6 , heated in a sealed tube 6 hrs. at 60.degree., and the same procedure followed as before, yields 2-dimethylaminoethyl .beta.-dimethylaminopropionate, $\text{Me}_2\text{NCH}_2\text{CH}_2\text{CO}_2\text{CH}_2\text{CH}_2\text{NMe}_2$, b3 85.degree.; dimethiodide, m. 190.degree.. Caprolactam (100 g.), 100 cc. concd. HCl , and 150 cc. water, refluxed 2 hrs., concd. almost to dryness in vacuo, dissolved in enough hot concd. Na_2CO_3 to give a slightly alk. soln., 180 g. 31% HCHO and 100 g. 85% HCO_2H added, the mixt. refluxed 2 hrs. (until no more CO_2 is evolved), more HCHO and HCO_2H added, the mixt. again heated until no more CO_2 is evolved, evapd. to dryness in vacuo, taken up in 400 cc. anhyd. EtOH , satd. with HCl gas, allowed to stand 12 hrs., refluxed many hours with continuous passage of HCl , cooled, filtered, distd. in vacuo, the residue taken up in excess concd. aq. Na_2CO_3 , extd. with Et_2O , the ext. dried, evapd., and the residue distd. in vacuo, yield 30 g. of Et .epsilon.-dimethylaminocaproate, $\text{Me}_2\text{N}(\text{CH}_2)_5\text{CO}_2\text{Et}$ (XX), b2-3 75-8.degree.; methiodide (XXI), m. 65.degree.. XX (15 g.), 35 g. $\text{Me}_2\text{NCH}_2\text{CH}_2\text{OH}$ (XXII), and 0.05 g. Na , distd. slowly to eliminate the EtOH formed, then distd. in vacuo, the residue taken up in ice water satd. with CO_2 , excess 50% aq. K_2CO_3 added, the mixt. extd. with Et_2O , and the ext. dried and distd. in vacuo, yield 13 g. 2-dimethylaminoethyl .epsilon.-dimethylaminocaproate, b2 110.degree.; dimethiodide, m. 207.degree.. XX (10 g.) and 20 cc. concd. HCl , refluxed 1 hr., the water eliminated, the residue dried, 40 cc. CHCl_3 and 20 g. PCl_5 added, the CHCl_3 distd., all traces of other volatile substances eliminated in vacuo, the residue, with 6 g. choline chloride and 40 cc. CHCl_3 refluxed 3 hrs. (until no more HCl is evolved), evapd., the residue freed of impurities by vacuum distn., the product dissolved in a min. of water, 16 g. NaI in 50 cc. boiling EtOH added, the mixt. refluxed for a short time, filtered hot, made ice-cold, and the ppt. purified by MeOH , yield choline iodide .epsilon.-dimethylaminocaproate- HI , $\text{IHMe}_2\text{NCH}_2\text{CH}_2\text{CH}_2\text{CH}_2\text{CH}_2\text{CO}_2\text{CH}_2\text{CH}_2\text{NMe}_3\text{I}$ (XXIII), m. 210.degree.. XXI (from 5 g. XX) and 20 g. XXII, heated 2 hrs. at 120.degree., the excess XXII eliminated in vacuo, the soln. extd. with water, the filtered ext. salified with K_2CO_3 , washed with Et_2O , extd. with Me_2CO , the ext. dried, evapd., the residue (5.3 g.) taken up in 20 cc. MeOH , treated with HCl gas, boiling alc. NaI added, the mixt.

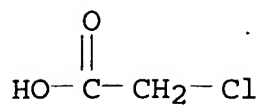
filtered, concd. in vacuo, cooled, filtered, again concd. in vacuo (1 mm. and 100.degree.), taken up in 7 cc. boiling Me₂CO, filtered, and allowed to stand, ppt. 2-(dimethylamino)ethyl .epsilon.-dimethylaminocaproate-HI. MeI, IMe₃N(CH₂)₅CO₂CH₂CH₂NMe₂HI (XXIV), rose, m. 159.degree.. The pharmacol. properties of some of the products and other compds. were studied to throw light on the relation between chem. structure and curaric activity.

[IMe₃NCH₂CH₂OCOCH₂]₂ (XXV) has a high activity which is about twice that of d-tubocurarine and higher than any synthetic curare compd. reported. XXV is an isomer of [IMe₃NCH₂CH₂CO₂CH₂]₂ (XXVI), and is the most active in the series of aliphatic esters of choline. XIV and its isomer [IMe₃NCH₂CH₂O₂CCH₂CH₂]₂ are less active than either XXV or XXVI. This shows that in this series there is an optimum distance between the quaternary N atoms which gives max. curaric activity. In conformity with this is the fact that XVII has about the same activity as that of its isomer p-C₆H₄(CO₂CH₂CH₂NMe₃I)₂. The curaric properties of III, V, XI, XII, XV, and XVIII are at variance with conclusions which might be drawn from the earlier observations that the location of the CO₂ groups has no predominant influence on the curaric activity. Thus XI, which is isomeric with XXV and XXVI, both of which are very active, shows no curaric activity in spite of possessing the optimum distance between N atoms. The inactivity of III, V, XII, XV, and XVIII is related to a common property, the proximity of the CO₂ group to the quaternary N atom. Hence the CO₂ group influences this N atom when the former is less than 2 C atoms away. The properties of the monoesters confirm these conclusions. The relatively low curaric activity of XXIII and XXIV (which have mixed tertiary-quaternary functions) is of the same order as that of XXI (which has only 1 quaternary N function), and is much lower than that of the corresponding biquaternary compd., showing that introduction of a tertiary amine function does not modify significantly the activity of the original quaternary ammonium group, even if it is at the point where the introduction of a second quaternary ammonium group would increase greatly the curaric action of the particular mol. Some of the compds. are good surgical anesthetics.

IT 108-01-0, Ethanol, 2-dimethylamino-
(derivs.)
RN 108-01-0 HCA
CN Ethanol, 2-(dimethylamino)- (8CI, 9CI) (CA INDEX NAME)

Me₂N-CH₂-CH₂-OH

IT 79-11-8, Acetic acid, chloro-
(esters)
RN 79-11-8 HCA
CN Acetic acid, chloro- (8CI, 9CI) (CA INDEX NAME)



- CC 10 (Organic Chemistry)
IT 62-49-7, Choline **108-01-0**, Ethanol, 2-dimethylamino-
1072-09-9, Hexanoic acid, 6-dimethylamino-
(derivs.)
IT **79-11-8**, Acetic acid, chloro- 107-21-1, Ethylene
glycol 110-63-4, 1,4-Butanediol 123-31-9, Hydroquinone
590-92-1, Propionic acid, 3-bromo- 1118-68-9, Glycine,
N,N-dimethyl- 1606-01-5, Glycine, N,N-diethyl- 6300-04-5,
.beta.-Alanine, N,N-dimethyl-
(esters)